DOCUMENT RESUME

ED 257 943 CE 041 438

TITLE	Driver Education Curriculum Guide.
INSTITUTION	Frederick County Board of Education, Md.
PUB DATE	85
NOTE	204p.
PUB TYPE	Guides - Classroom Use - Guides (For Teachers) (052)
EDRS PRICE	MF01/PC09 Plus Postage.
DESCRIPTORS	Alcohol Education; Behavioral Objectives; *Classroom Techniques; *Course Content; Curriculum; *Driver Education; Drug Education; Equipment; *Experiential Learning; High Schools; Instructional Films; Learning Activities; *Teaching Methods; *Traffic Safety; Units of Study
IDENTIFIERS	*Maryland (Frederick County)

ABSTRACT

Developed for use in high school driver education programs in Frederick County, Maryland, this curriculum guide contains five units for classroom instruction, along with a unit for range driving instruction and one for road driving experience. The five classroom units cover the following topics: preparing to drive, driving skills, the effects of alcohol and drugs on driving, driver responsibilities, and the driver as a consumer. Each unit consists of goals, lesson objectives keyed to lesson content, suggested activities and resources, and equipment needed. The curriculum guide also contains information for the instructor and extensive appendixes. Appendixes provide information on using movies in the driver education classroom and a list of appropriate films, guides for writing test items, excerpts from Maryland law, forms and checklists used in the driver education program, information on the effects of alcohol and drugs on driving, insurance information, and regulations concerning the use of driver education vehicles. (KC)

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Driver Education

Curriculum Guide

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BOARD OF EDUCATION OF FREDERICK COUNTY, MD.

DRIVER EDUCATION
CURRICULUM GUIDE

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FREDERICK COUNTY PUBLIC SCHOOLS
Frederick, Maryland
1985

ACKNOWLEDGEMENTS

No curriculum writes itself. Rather, it is developed through the efforts of individuals who use their expertise and experience in the construction and organization of the written document.

The curriculum contained in this guide was developed and written with the efforts of the following individuals:

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DRIVER EDUCATION

The primary goal of any driver education program is to develop in the learner those habits which produce a safe and efficient driver. The Board of Education of Frederick County is in full agreement with this goal.

INTRODUCTION

The driver education program operated by the Board of Education of Frederick County consists of a three-part curriculum encompassing classroom instruction, range experience driving, and road experience driving. The total program meets or exceeds all requirements for a driver education course as set forth by the laws of the State of Maryland.

It is expected that students who complete the driver education program will acquire the necessary skills, practices, knowledge, and procedures needed to obtain a valid driver's license. It is further hoped that the instruction provided will instill in the student driver those attitudes and attributes which produce self-control and driving courtesy.

Edward J. Kerns, Jr.
Curriculum Specialist for Driver Education

To the Instructors:

The following list of guidelines are included in this guide for your information. The guidelines list those responsibilities of the teacher and laboratory instructor as they pertain to the driver education program and to the vehicles assigned to the program.

GUIDELINES

General

1. Accidents

    A. If at any time a vehicle assigned to you (range vehicles included) is involved in an accident, you are to contact the Transportation Department of the Board of Education as soon as possible. Contact should be made from either the scene of the accident or the closest proximity to it.

    B. All accidents involving personal injury are to be reported to the police.

    C. Accidents involving another vehicle (excluding minor "fender-benders" on school ranges) are to be reported to the police.

    D. Parents/Guardians of students who are involved in any accident are to be notified, even if no personal injury was sustained!

    E. A written report is to be filed with the Transportation Department of the Board of Education for all accidents. This report is in addition to the standard form used for police and insurance.

2. Vehicle Maintenance

    A. The interior cleanliness of any vehicle assigned to you is your responsibility. Vehicle interiors are to be kept clean and free of trash at all times.

    B. A daily visual check of each vehicle is to be made and any damage to the vehicle noted.

3. Fuel Purchases

   A. Fuel is to be purchased only by credit card and only at those service stations where the card is kept. Only fuel or motor oil is to be charged to BOE credit cards.

   B. The Board of Education has no provisions to reimburse instructors who purchase fuel using cash or personal credit cards.

4. Private use of driver education vehicles is prohibited.

5. Student Drivers

   A. Priority for road instruction is to be based, whenever possible, on birthdates. Older students should be the first scheduled.

   B. Students who have been suspended from school will be permitted to make up lost class or road time provided no disruption or interference to the instruction of other student occurs. This usually means that students who have been suspended are placed last on the road/range schedules.

Specific Responsibilities

The classroom teacher should:

1. be totally responsible for the classroom portion of the driver education program.

2. arrange for all audio visual materials, textbooks, handbooks, equipment, and speakers for the driver education program.

3. work with the laboratory instructor in developing range and road schedules.

4. work with the school principal or the principal's designated assistant in all matters pertaining to driver education at the school site.

5. insure that all student records are completed and properly filed.

6. inform the laboratory instructor of all information originating from the Transportation Department of the Board of Education.

7. check medical records and become familiar with the physical/medical, and/or learning disabilities of students, and share this information with the laboratory instructor.

8. complete the driver education transmittal records, and certificates and forward the necessary copies to the curriculum specialist.

Restrictions

While involved with range and/or road work with students, teachers and laboratory instructors will refrain from the following:

1. Covering (with the hand or otherwise) any dashboard instrument
2. Shutting off the ignition while the car is in motion
3. Using loud or abusive language directed toward a student
4. Smoking, eating, or drinking in the presence of students (see note)
5. Exceeding the posted speed limits
6. Removing a student from driving experience work because of a driving error (Students may be failed at the end of their allotted driving time, but not before)
7. Stopping the vehicle during road experience driving to engage in personal business
8. Having students change flat tires
9. Acting as a license testing official
10. Engaging in any practice during work with students that would, by definition, be considered unsafe

Tips for the Teacher/Laboratory Instructor

Teachers and laboratory instructors are encouraged to make use of the following practices:

1. Frequently question student drivers regarding the posted speed limits, vehicle speed, traffic conditions, etc.
2. Praise correct maneuvers and driving skills of the student driver.
3. Offer critiques of the students that develop good driving practices.
4. Maintain a positive attitude toward the student driver.
5. Have students repeat maneuvers to correct errors (i.e. if a student misses a traffic control device or sign, having the student drive to areas where he/she will encounter a multitude of similar devices/signs).
6. Maintain your sense of humor.

*Note: In extreme weather (heat, cold, snow, etc.) teachers and laboratory instructors working outside on the range will be permitted to have non-alcoholic beverages.

UNIT I

Preparing to Drive

- Introduces the Highway Transportation System (H.T.S.) to the student and stresses the responsibilities of the driver to the system.
- Teaches the student the importance of pre-ignition checks, prior to starting a motor vehicle.
- Explains the function and use of vehicle controls, gauges, and safety features, particularly the passenger restraint devices.
- Stresses the importance of the various traffic (vehicle) control signals, signs, and pavement markings.

Goal 1: To make students aware of the Highway Transportation System and their responsibilities in it.

Unit I

Preparing to Drive

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 The Highway Transportation System	1.0.1 The purpose of the H.T.S.	1.0.1.1 Read Chapter 1 (Drive Right 1977 ed., 1982 ed.)	Text: Drive Right
1.1 The student will demonstrate knowledge of the H.T.S. and be made aware of their responsibilities toward other users of the H.T.S.	1.1.1 The place of the driver in the H.T.S.	1.1.1.1 Maryland Driver's Handbook	Handbook: Maryland Driver's Handbook
1.2 The student will be made aware of the agencies involved in regulating the H.T.S.	1.2.1 Agencies regulating the H.T.S. A. M.V.A. 1. Learner's permit 2. Provisional license 3. Driver's license a. Types b. Requirements	1.2.1.1 Students will fill out license applications 1.2.1.2 Review page 68 in Maryland Driver's Handbook	License blanks (may be duplicated) Maryland Driver's Handbook
	B. Police agencies 1. State 2. Local	1.2.1.3 Arrange for speakers to discuss the H.T.S. regulatory procedures	Guest speakers
	C. Legislature 1. Initiate bills 2. Make laws	1.2.1.4 Have class work on the map unit in connection with the H.T.S.	MD state highway maps Other state maps Road Atlas
	D. Judicial 1. Interpret laws 2. Fines/sentences		

Unit I

Preparing to Drive

Goal 2: To teach the
procedures for the safe
operation of a motor vehicle

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
2.0 The student will demonstrate knowledge of the steps required for the safe operation of a motor vehicle			
2.1 Student will have knowledge of pre-ignition checks, and be able to explain them	2.1.1 Discussion of the importance of the pre-ignition checklist with emphasis on passenger restraint system A. Door locked B. Key in ignition C. Seat adjustment D. Mirror adjustments E. Passenger restraint F. Gauge check G. Initial traffic check (References should be made to range orientation)	2.1.1.1 Discuss pre-ignition checklist in textbook	Text
		2.1.1.2 View and discuss one or more of the following films: Unrestrained Flying Objects (BOE) We Drivers (IMC) Before It's Too Late (State Police) Passive Restraints (State Police) (See Appendix for information on use of films)	16 MM projecter
		2.1.1.3 Class discussion of the importance of pre-ignition checks Try to have students defend reasons for not using the check system, then have other students challenge those reasons	

Goal 2: To teach the procedures for the safe operation of a motor vehicle

Unit I

Preparing to Drive

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
2.1 continued		2.1.1.4 Use the Maryland State Police weekly fatalities sheets	State Police fact sheets
		2.1.1.5 Tests	

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Goal 3: To teach the use of vehicle control and instruments

Unit I

Preparing to Drive

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
3.0 The student will be instructed in the use of vehicle equipment including: controls, gauges (instrument panel), and safety devices			
3.1 The student will explain the functions of the steering column, braking system, acceleration pedal, and gear shift lever	3.1.1 Control equipment of an automobile and their functions A. Steering column 1. Ignition 2. Horn 3. Turn signals/ multi control lever 4. Washers/wipers 5. Speed control	3.1.1.1 Assign Chapter 2 (1982 ed.) or Chapter 3 (1977 ed.) (Drive Right) and discuss in class. Work out review questions. 3.1.1.2 Have students begin a notebook listing vocabulary words and definitions. Be sure to periodically check students' lists.	Textbook
	B. Braking system 1. Power assist brakes 2. Drum brakes 3. Parking brake C. Acceleration 1. Setting the choke 2. Electronic ignition 3. Passing gear D. Gear shift selector 1. Automatic shift a. Floor b. Column 2. Standard shift a. Use of clutch b. Gear shift reverse 3. Gear order 4. Use of different gears	3.1.1.3 Develop a set of transparencies for use with classes illustrating these systems or use the sets from the BOE	Overhead projector Transparencies sets (BO

Goal 3: To teach the use
of vehicle control and
instruments

Unit I

Preparing to Drive

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
3.2 The student will be able to discuss and explain the purpose of the instrument panel gauges and controls	3.1.2 Instrument panel gauges and controls and their function A. Speedometer/odometer B. Lighting systems 1. Low beam 2. High beam 3. Hazard (flashers) 4. Parking (brake lights) 5. Interior lights 6. Back-up lights C. Fuel gauge D. Windshield wiper control E. Other gauges/controls	3.1.2.1 Have students draw diagrams of the instrument panel of the family vehicle(s) and note location of various gauges/controls. Class discussion on the similarities/dissimilarities of locations between various manufacturers of motor vehicles	
		3.1.2.2 Have students develop their own lists of equipment that can be operated by the driver - compare lists	
		3.1.2.3 Use New Driver Magazine as a basis for class discussions	New Driver Monthly
		3.1.2.4 Use the chapter test on page 53 of the 1977 ed. or page 33 of the 1982 ed. of text or teacher developed test may be utilized	Textbook(s)

Goal 4: To teach the student the proper interpretation of road signs, signals, and pavement markings

Unit I

Preparing to Drive

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
4.0 The student will be able to explain the meaning of the various vehicle control devices used on the H.T.S.	4.0.1 Traffic signs and their meanings by shape and color A. Information B. Warning C. Regulatory D. International	4.0.1.1 Read and discuss Chapter 2 (Drive Right) 1977 ed. or Chapter 3 (1982 ed.)	Textbook
		4.0.1.2 Do the chapter review and test for Chapter 2 or 3	
		4.0.1.3 Use the traffic sign transparency set (BOE) for general class discussion. Have the students make copies of the shapes/meanings for their notebooks	Overhead projector transparency set
		4.0.1.4 Film: Signs (IMC)	16 MM projector
	4.0.2 Traffic signals and their uses A. Type of lights B. Timing systems	4.0.2.1 Refer to appendix for hints on film use	
	4.0.3 Pavement markings A. Color B. Solid and broken lines C. Painted curbing	4.0.3.1 Use the Maryland Driver's Handbook, Chapter 8, as a class discussion lead-in	Handbook
		4.0.3.2 Use worksheets from the Drive Right Skills and Applications Book; or develop your own worksheet using the workbook as a guide	Drive Right Skills and Applications Workbook; Scott, Foresman & Co., 1982

Unit I

Preparing to Drive

Goal 5: To teach the student the I.P.D.E. System of driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.0 The student will demonstrate knowledge of the I.P.D.E. System of driving and how it applies to all driving situations		5.0.0.1 Students will read Chapter 5 (Drive Right) 1977 ed. or Chapter 6, 1982 ed. You may have the students work the chapter tests	Textbooks
		5.0.0.2 Students will view the filmstrip: I.P.D.E. - A System for Accident Free Driving (BOE)	Filmstrip projector
		5.0.0.3 Have the classes view the film: A System for the Road (BOE)	16 MM projector
5.1 The student will explain the importance of identifying problems while driving a motor vehicle	5.1.1 Identify - the I of I.P.D.E.	5.1.1.1 Students will develop charts for their notebooks on the Smith System of identifying and avoiding driving problems	
5.2 The student will explain the importance of predicting potential driving situations	5.2.1 Predict - the P of I.P.D.E.	(Refer to the appendix for hints on using films with classes)	
5.3 The student will explain the importance of deciding the proper response to a driving situation	5.3.1 Decide - the D of I.P.D.E.	5.1.1.2 Use the overhead transparency sets that depict the I.P.D.E. process	Overhead projector

Goal 5: To teach the student the I.P.D.E. System of driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.4 The student will explain the importance of proper execution of a driving decision	5.4.1 Execute - the E of I.P.D.E. (Note: Reference to the I.P.D.E. System will be continually referred to during the driver education program)		
5.5 The student will be able to explain brake reaction time	5.5.1 The importance of reaction time in driving	5.5.1.1 Students will be given brake reaction test. Data should be recorded in students' workbooks	Brake reaction times, also visual activity test and color blindness test book, etc.
		5.5.1.2 Other tests for color blindness, visual activity, etc. may be given students	

UNIT II

Driving Skills

- Introduces driving techniques used in all driving situations.
- Discusses the methods of parking a motor vehicle.
- Discusses the techniques needed to make legal turnarounds.
- Discusses the techniques required to overcome emergency driving situations.
- Introduces the student to the procedures used in overcoming vehicular equipment failures.
- Discusses how to minimize injury in an accident.

Goal 1: To teach the
student the driving
techniques necessary
for all situations

Unit II

Driving Skills

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 The student will demonstrate knowledge of how natural laws affect driving situations	1.0.1 The effects of friction on the motor vehicle A. Friction as it relates to traction B. Friction as it relates to stopping distance	1.0.1.1 Students will read Chapter 4 (Drive Right) 1977 ed. or Chapter 5 (1982 ed.) and record vocabulary list in their notebooks	Text
	1.0.2 Gravity and its effects on driving a motor vehicle	1.0.1.2 Class will be assigned the review pages and take the chapter test	
	1.0.3 Centrifugal force and its effect on a motor vehicle on curves	1.0.1.3 Refer to the film listings in the appendix. Several films are available which graphically illustrate how changing road conditions affect the handling of vehicles.	16 MM projector
	1.0.4 Momemtum - energy of motion A. Impact B. Importance of passenger restraints	1.0.1.4 As above	
		1.0.1.5 Develop worksheet from the Drive Right Skills and Application Book (Chapter 4)	Drive Right Skills and Application Book

Goal 2: To teach the
student the various
methods of parking

Unit II

Driving Skills

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
2.0 The student will demonstrate knowledge of the various methods of parking a motor vehicle	2.0.1 Parallel parking A. Traffic check B. Proper signal C. Space needed for maneuver D. Control of speed while backing E. Exiting procedures	2.0.1.1 Students are assigned pages on parking from text and asked to diagram the techniques used for each skill. Those diagrams are to be kept in their notebooks.	Text
	2.0.2 A. Traffic check B. Proper signal C. Turning maneuver D. Exiting procedures	2.0.1.2 Use worksheet from Chapter 4 in the Drive Right Skills and Application Book to review student's knowledge	Drive Right Skills and Application Book
	2.0.3 Perpendicular parking A. Traffic check B. Proper use of signals C. Turning maneuver 1. Pull-in 2. Back-in D. Exiting procedures Note: Emphasis on this section will occur during range experience. Class discussion will be minimal.		

Goal 3: To teach the student the proper methods for making vehicular turnabouts

Unit II

Driving Skills

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
3.0 The student will demonstrate knowledge of the proper procedures used in a legal turnabout with a vehicle	3.0.1 The two-point turnabout A. Right side turns B. Left side turns C. General safety rules for all maneuvers	3.0.0.1 Assign Chapter 6 (Drive Right) pgs 93-97, (1977 ed.) or Chapter 4 (1982 ed.), class discussion to follow readings	Text
	3.0.2 The three-point turnabout	3.0.0.2 Use the overhead projector to illustrate the methods of making safe turnabouts	Overhead projector
	3.0.3 The legal U turn	3.0.0.3 Have students read and react to "The Driving Skills Book" Shell answer series #14	
	In all of the above the proper use of signals, body position, and traffic checks will be emphasized		
	Note: Primary emphasis of these lessons will occur during range experience		
	3.0.4 General safety rules for all maneuvers (Review)		

Goal 4: To teach the student the methods used in overcoming emergency driving situations

Unit II

Driving Skills

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
4.0 The student will demonstrate knowledge of those special driving techniques necessary to overcome emergency driving situations			
4.1 The students will be able to correctly explain the procedures needed to overcome problems with visibility	4.1.1 Visibility problems caused by: A. Inclement weather B. Night driving 1. Twilight problems 2. High beam 3. Over-driving headlights C. Sun glare D. Dirty windshield 1. Interior 2. Exterior	4.1.1.1 Assign Chapter 12 (1982 ed.) or Chapter 13 (1977 ed.) (Drive Right) for disucssion-have students do chapter review and take chapter test 4.1.1.2 Have students read and react to "The Foul Weather Driving Book" Shell answer series #11 and the "Unexpected Dangers Book" Shell answer series #12	Text

Goal 4: To teach the
student the methods used
in overcoming emergency
driving situations

Unit II

Driving Skills

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
4.2 The student will be able to correctly explain the procedures used in overcoming driving problems created by inclement weather or emergency conditions	4.2.1 Traction problems created by inclement weather or emergency conditions A. Hydro-planing B. Skidding on icy roads C. Increase in braking distance D. Increase in following distance E. Off the road recovery F. Swerving to avoid G. "Stuck" vehicle H. Other	4.2.1.1 Use one or more of the following films: Don't Skid Yourself (State Police) Waterskiing on Four Wheels (State Police) We Drivers (IMC)	16MM projector
		4.2.1.2 Utilize worksheet on page 45 in the Drive Right Skills and Application Book	Drive Right Skills and Application Book
		4.2.1.3 As above in 4.1.1.2	Shell answer books #'s 2, 11, and 12
		4.2.1.4 Have student read and react to "The Breakdown Book" Shell answer series #2	

Goal 5: To teach the
student those defensive
driving skills needed to
overcome emergency situations

Unit II

Driving Skills

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
4.3 The student will demonstrate knowledge of how to handle equipment failure and/or human error	4.3.1 Driving reaction required by a driver in cases of failure of: 1. Brakes 2. Steering system 3. Blow-outs 4. Blocked vision a. Shattered windshield b. Mud, rain, etc. 5. Fire 6. Stuck accelerator 7. Stalled engine	4.3.1.1 Lead discussion on the types types of driving emergencies that may occur. Work with student reactions to given situations (appropriate pages from text should be assigned)	Text
		4.3.1.2 Arrange for a speaker to cover emergency topics (local police, state police, racing drivers, etc.)	
		4.3.1.3 Have students read and react to the Shell answer book #2 "The Breakdown Book"	
	4.3.2 Driving reaction required by a driver in case of human error by the driver or the driver of another vehicle 1. Off the road recovery 2. Vehicle immersed in water 3. Spin recovery	4.3.2.1 Have students view any pertinent films. (See Appendix)	16MM projector
		4.3.2.2 Have students read and react to the Shell answer book #7 "The Driving Emergency Book"	

Goal 6: To teach the
student methods of
minimizing accidents

Unit II

Driving Skills

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.0 The student will demonstrate knowledge of accident avoidance and procedures used to minimize injury in an accident	5.0.1 Defensive driving techniques used in: 1. Accident avoidance 2. Reaction to situations 3. Restraint systems 4. Driving techniques	5.0.1.1 Assign appropriate pages from text (Drive Right) for class discussion	Text
		5.0.1.2 Have students read and react to "The Accident Book", Shell answer series #15	Shell answer book #15
		5.0.1.3 Arrange for a speaker to discuss defensive driving techniques and avoidance of accidents	
		5.0.1.4 Utilize the Drive Right Skills and Applications Book. Several chapters are appropriate for defensive driving discussions in the classroom	Drive Right Skills and Applications Book

UNIT III

The Effects of Alcohol and Drugs on Driving

- Instructs students on the effects of alcohol on the central nervous system.
- Instructs students on the effects of drugs (legal and illegal) on the central nervous system.
- Instructs students on the legal aspects of DWI/DWD.
- Provides information on the Implied Consent Law.
- Discusses common misconceptions of alcohol.
- Provides inmformation on techniques used to discourage persons under the influence of alcohol/drugs from driving.

Unit Goal: To teach students the effects of alcohol and drugs on the body and to inform them of the legal aspects involved while driving under the influence

Unit III

The Effects of Alcohol and Drugs on Driving*

(This unit is to receive heavy emphasis)

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 The student will be able to discuss the various ways alcohol affects the central nervous system	1.0.1 Factors that determine: 1. How alcohol enters the blood system 2. How the brain is affected by alcohol a. Reaction time b. Vision c. Coordination d. Basic bodily functions	1.0.1.1 Assign appropriate pages from text (Drive Right) for discussion - answer all review questions	Textbook Maryland Driver's Handbook
		1.0.1.2 Have students record vocabulary list in their notebooks, with full explanation of terms	
		1.0.1.3 Arrange for speaker from Alcoholism and DWI Clinic	
		1.0.1.4 View film:** Until I Get Caught (MD State Police) Drinking and Driving (MD State Police) Drinking, Driving, and Drugs (IMC) The Social and Anti-Social Drink (IMC)	16MM projector

*Note: It is suggested that a minimum of five class periods be spent on this unit.

**See appendix for suggested film and descriptions

Unit Goal: To teach students the effects of alcohol and drugs on the body and to inform them of the legal aspects involved while driving under the influence

Unit III

The Effects of Alcohol and Drugs on Driving

(This unit is to receive heavy emphasis)

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 continued		1.0.1.5 Read and discuss with class Chapter 5 in the Maryland Driver's Handbook 1.0.1.6 Arrange with the County or State Police to speak with the class on the results of DWD or DWI 1.0.1.7 Have students keep a running tally of fatalities due to alcohol using the weekly State Police reports	

Unit Goal: To teach students the affects of alcohol and drugs on the body and to inform them of the legal aspects involved while driving under the influence

Unit III

The Effects of Alcohol and Drugs on Driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.1 The student will be able to discuss how the major drug families affect the central nervous system	1.1.1 Legal and illegal drugs and their affects on the central nervous system 1. Marijuana A. Long-term effects unknown B. Mild hallucinogen C. Full effects have yet to be determined 2. Tranquilizers and Antihistimins A. Reduce tension (relaxants) B. Lower blood pressure C. Depress nervous system 3. Stimulants A. Elevate blood pressure B. Temporary increase in energy C. "Backlash"	1.1.1.1 Assign Chapter 16 pages 275-76 (1982 ed.) or Chapter 17 pages 290-93 (1977 ed.) for discussion and develop test questions for each drug family 1.1.1.2,3,4,5 as per lesson on alcohol Additional: Speaker from the Drug Rehabilitation Clinic can discuss the difficulty of overcoming drug habits	Textbook Audio visual equipment as per speaker's request

Unit Goal: To teach students the affects of alcohol and drugs on the body and to inform them of the legal aspects involved while driving under the influence

Unit III

The Effects of Alcohol and Drugs on Driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.1 continued	1.1.1 continued		
	4. Sedatives		
	A. Heavy depressants		
	B. Produce sleep		
	C. Severe reduction of reaction time		
	D. Produce dependence		
	E. Overdose can cause death		
	5. Hallucinagenic Drugs		
	A. Distance vision		
	B. Distance perception		
	C. Alter senses		
	6. Narcotics		
	A. Depress central nervous system		
	B. Produce dependence		
	C. Overdose can cause death		

Unit Goal: To teach students the affects of alcohol and drugs on the body and to inform them of the legal aspects involved while driving under the influence

Unit III

The Effects of Alcohol and Drugs on Driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
3.0 The student will demonstrate knowledge of laws and limitations regarding driving while under the influence of drugs/alcohol	3.0.1 Legal alcohol level 1. .05 chart and BAC* 2. Breath tests 3. Arrest/point system 4. Other chemical tests	3.0.1.1 Assign pages 5 and 68 in the Maryland Driver's Handbook for discussion	Maryland Driver's Handbook
		3.0.1.2 Refer to the Appendix for appropriate films	16MM Projector
	3.0.2 The Implied Consent Law** 1. Any person who drives on a road falls under this law** 2. Suspension of license 3. Court hearing 4. All states have this law	3.0.1.3 Have the Frederick City Police demonstrate the BATMOBILE to students. This is a good program for larger groups to consider (student tour following demonstration)	Frederick City Police Department's BATMOBILE and officer (BAT - Breath Analyzer Test)
	3.0.3 Penalties incurred for driving under the influence 1. Loss of license 2. Imprisonment 3. Financial 4. Civil law suites 5. Reputation	3.0.3.1 Students read and discuss pages 22,37,63,66,67,68 in Maryland Driver's Handbook	

*BAC - Blood Alcohol Content

**The Implied Consent Law - any person driving on public highway is deemed to have consented to take a chemical test to determine BAC

Unit Goal: To teach students
the affects of alcohol and
drugs on the body and to inform
them of the legal aspects
involved while driving under
the influence

Unit III

The Effects of Alcohol and Drugs on Driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
3.0 continued		3.0.3.2 State Police speaker to present the legal penalties incurred for arrest while driving while intoxicated (large group presentation) 3.0.3.3 Contact MADD for literature to discuss with class. Audio visual material from MADD may be forthcoming in near future.	

Unit Goal: To teach students the affects of alcohol and drugs on the body and to inform them of the legal aspects involved while driving under the influence

Unit III

The Effects of Alcohol and Drugs on Driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
4.0 The student will be able to discuss common misconceptions regarding alcohol	4.0.1 Commom misconceptions regarding alcohol and driving 1. Resistance 2. Exercise 3. Taking stimulants 4. Drinking coffee 5. "Only" drinking beer or wine 6. Eating before drinking 7. One or two drinks are good for the digestion 8. Cold showers will sober up a drunk 9. Some people drive better after drinking		

Unit Goal: To teach students the affects of alcohol and drugs on the body and to inform them of the legal aspects involved while driving under the influence

Unit III

The Affects of Alcohol and Drugs on Driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.0 The student will be able to discuss techniques useful to discourage persons under the influence from driving and/or what to do if he/she is a passenger with such a driver	5.0.1 Responsibilities of persons holding parties where drinks are served 1. No "heavies" or "doubles" 2. Offers transport to those who exceed drinks to weight ratio 3. Providing over-night accommodations 4. Taking keys 5. Other	5.0.1.1 Use the situation pictures on page 293 (1977 ed.) Drive Right or page 278 (1982 ed.) to stimulate discussion on preventing intoxicated persons from driving 5.0.1.2 Have the students develop a class list of "ideas" to prevent persons under the influence. Write all suggestions on chalkboard and then have class decide what suggestions are really practical.	Textbook
	5.0.2 Refusing to ride with those who are impaired because of alcohol/drugs		
	5.0.3 Steps useful in preventing and discouraging driving while under the influence 1. Encouragement not to drive 2. Delay trip by conversation, walking, etc. 3. Encouragement to rest before trip 4. Removal of keys 5. Other	5.0.3.1 Use student skits (role playing) to illustrate specific topics 5.0.3.2 Use skills sheet on page 61 of Skills/Applications Workbook	Drive Right Skills/Applications Workbook

UNIT IV

Driver Responsibilities

- Informs students of the Maryland State Law as it concerns vehicle insurance.
- Informs students of the requirements needed to obtain a driver's license.
- Instructs students on the procedures required of an individual involved in a motor vehicular accident.
- Instructs students on the right of way rule in driving.
- Instructs students on the driving techniques used to avoid following too closely.
- Instructs students on the driving techniques used in avoiding being followed too closely.
- Instructs students on the driving techniques to use when approaching oncoming traffic.
- Instructs students on driving techniques to use when overtaking and passing other vehicles.
- Instructs students on the driving techniques used for entry onto expressways, expressway driving, and leaving expressways.
- Instructs students on the driving techniques used in city driving, at intersections, and when dealing with pedestrians, bicycles, motorcycles.
- Instructs students on how emotions and attitudes affect driving.
- Instructs students on the importance of using map reading skills in the driving process.

Unit Goal 1: To instruct students in their legal responsibilities as drivers

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 The student will demonstrate knowledge of Maryland's motor vehicle law concerning insurance requirements	1.0.1 Maryland's Compulsory Insurance Law 1. Minimum mandated insurance coverage 2. Penalties for failure to comply with the law	1.0.1.1 Assign pages 320-323 (old ed.) or pages 286-288 (new ed.) and page 65 in the Driver's Handbook to read in preparation for class discussion	Textbook Handbook
		1.0.1.2 Invite a guest speaker (police/insurance agent) to discuss this law (large group presentation)	
		1.0.1.3 Use Appendix F as a basis for class discussion	
		1.0.1.4 Have students contact various insurance companies for their rate structures for beginning drivers. Students can then compare rates and coverages of various insurance carriers.	
		1.0.1.5 Use Chapter 17 (pages 65-66) of workbook - Buying and Insuring a Car	Drive Right Skills and Applications Workbook
		1.0.1.5 Save New Driver magazines and use appropriate articles for reading and discussion	New Driver

Unit Goal 1: To instruct
students in their legal
responsibilities as drivers

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
2.0 The student will demonstrate knowledge of the required procedures to follow in case of a motor vehicular accident	2.0.1 Procedures required in case of accident 1. Required to stop at the accident scene 2. Required to assist injured person/persons 3. Required to identify yourself 4. Required to provide insurance information 5. Required to leave written notice 6. Required to file written report in case of injury or death Note: If State Police investigate accident, this requirement is voided.	2.0.1.1 Assign pages 324-325 in textbook (Drive Right) and page 70 in the Driver Handbook to read and discuss in class	Textbook Handbook
		2.0.1.2 Have a speaker address classes on the importance of complying with the law	
		2.0.1.3 Have students fill out copies of accident reports	Copies of accident reports
		2.0.1.4 Have students read and react to "The Accident Book" #15 in the Shell answer series	
		2.0.1.5 Current events class to discuss news articles related to driving and accidents	
	2.0.2 Penalties involved in failure to comply with the law 1. Arrest 2. Court 3. Fine/loss of points		
	2.0.3 Procedures to follow if you witness an accident		

Unit IV

Driver Responsibilities

Unit Goal 1: To instruct students in their legal responsibilities as drivers

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
3.0 The student will demonstrate knowledge of requirements for obtaining a Maryland Driver's License	3.0.1 Who must have a Maryland license?	3.0.1.1 Assign Chapter I in the Driver's Handbook. Conduct a class lesson stressing the required procedures needed to obtain a license.	Handbook
		3.0.1.2 Have students fill out the applications for a learner's permit	Learner's Permits
	3.0.2 Persons exempt from obtaining a Maryland license		
	3.0.3 Persons not to be licensed		
	3.0.4 Requirements to obtain a Maryland Driver's License 1. Age 2. Driver education 3. Co-signers 4. Provisional license		
	3.0.5 The Maryland Classified License Program		

Unit Goal 1: To instruct students in their legal responsibilities as drivers

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
4.0 The student will be able to discuss "right-of-way" rules and describe (oral or written) how these rules apply to various driving situations	4.0.1 Definition of right-of-way 1. Who goes first? 2. Safety consideration a. Supercede right of way rules b. When to yield 1. On-coming traffic 2. Traffic to right has right-of-way 3. Pedestrian right-of-way	4.0.1.1 Assign appropriate pages from text as a general overview of right-of-way rules. Use text illustrations as points of class discussion 4.0.1.2 Assign pages 24 and 25 in the Driver's Handbook to introduce students to Maryland's right-of-way rules	Textbook
	4.0.2 Maryland's five rules of right-of-way 1. Obey traffic control signals/devices 2. First vehicle entering an intersection has right-of-way 3. Yield right-of-way to all if entering roadway from private drive or road 4. Yield to pedestrians/traffic in intersection after light is green for you 5. On left turns yield to all until it is safe to turn	4.0.2.1 as above Refer to Appendix (films) several appropriate films are available to illustrate right-of-way rules	16MM projector
	4.0.3 Emergency vehicles have right-of-way		

Unit Goal 2: To instruct students in the methods of dealing with specific traffic situations

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.0 The student will be able to discuss the correct driving maneuvers required when following vehicles	5.0.1 Safe following distance 1. Recommended distances a. Dry road b. Wet road c. Two-second rule d. Stopping distance 2. Tailgating a. What it is b. Dangers involved c. Stopping distance	5.0.1.1 Assign pages 40 and 41 in the Driver Handbook for class discussion, paying particular attention to the illustration on page 41 which depicts the two second following procedure 5.0.1.2 Have students read pages 5 and 6 in "The Driving Skills Book," #14 in the Shell answer series	Handbook
	5.0.2 What to look for when following 1. Intersections 2. Brake lights 3. Shrinking distance 4. I.P.D.E. rules for following a. Time b. Distance c. Field of vision d. Side space		
	5.0.3 Accident statistics on rear end collisions	Additional: Several films are appropriate	

Unit Goal 2: To instruct students in the methods of dealing with specific traffic situations

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.1 The student will be able to discuss the correct driving maneuvers required of a driver being followed too closely by another vehicle	5.1.1 Communication with the following vehicle 1. Brake lights 2. Signals 3. Move to side of the road 4. Increase speed (other conditions permitting)	5.1.1.1 Have students read and react to "The Hazards Book", #21 in the Shell answer series	Shell answer book #21
		5.1.1.2 View either Space Driving Tactics or Defensive Driving Tactics (BOE)	16MM projector
	5.1.2 Importance of vehicle maintenance is an aid in preventing accidents 1. Brake system 2. Lights 3. Cleanliness of vehicle signals, lights		

Unit Goal 2: To instruct students in the methods of dealing with specific traffic situations

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.2 The student will be able to discuss the correct driving maneuvers required when meeting on-coming traffic	5.2.1 Avoiding accidents 1. Maneuvers 2. Anticipation 3. Lane positioning	5.2.1.1 Assign chapter review in Drive Right (page 136) (old ed.) or page 139 (new ed.)	Textbook
	5.2.2 Night driving and on-coming traffic 1. Use low beams	5.2.1.2 View film Defensive Driving Tactics (BOE)	16MM projector
	2. Signals to other drivers a. Flicking lights b. Do not turn high beams on to "get even" 3. Lane positioning	5.2.1.3 Assign answer book #7 in the Shell answer series for students to read and react to in class discussion. Discuss illustration on page 4	Shell answer series #7
	5.2.3 Driving the two-lane highway 1. Meeting on curves a. Lane positioning	5.2.1.4 Use In-Car Guides. Appropriate chapters on types of driving conditions	Drive Right In-Car Guide
	b. Proper speed control c. Use pavement markings and signs to anticipate potential hazards 2. Straight away highways a. Lane position b. Speed control c. Smith method of observation	5.2.1.5 Use Unit II in Skills and Applications Book to stimulate discussion	Drive Right Skills and Applications Book

Unit Goal 2: To instruct students in the methods of dealing with specific traffic situations

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.3 The student will be able to discuss the maneuvers necessary to successfully drive in congested and city traffic	5.3.1 Problems of city driving 1. Proper lane usage 2. Controlled and uncontrolled intersections a. Judging speed and distance b. Judging time to make maneuvers c. Choosing traffic gaps to cross or merge with traffic 3. Left and right hand turns a. Using traffic signals b. Using right-of-way rules c. Right turn on red rule d. Observing markers, lane lines, and street signs	5.3.1.1 Assign Chapter 7 to students, pages 108-115 (1977 ed.) or pages 106-113 (1982 ed.). Discuss illustrations on these pages with students	Textbook
		5.3.1.2 Preview Chapter 10 (1977 ed.) or Chapter 8 (1982 ed.) with class, paying particular attention to the chapter objectives	Textbook
		5.3.1.3 Chapter 7 of the In-Car Guide can be used for discussion or as a worksheet	In-Car Guide
	5.3.2 Railway Crossing 1. Controlled crossings 2. Uncontrolled crossings 3. Crossing procedures a. Speed control b. Window down c. Check rail lines on both sides		

Unit Goal 2: To instruct
students in the methods of
dealing with specific
traffic situations

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.3 City traffic - continued	5.3.3 Basic maneuvers for city driving 1. Speed reduction is vital in city driving a. I.P.D.E. time is less b. Following distance is shortened c. Pacing traffic lights 2. Be ready to brake a. Cover brake when approaching intersections or overtaking vehicles b. Be alert for pedestrians c. Observe parked cars for potential hazards 3. Proper lane position a. L/R hand turns b. Crossing intersections 4. Passing vehicles in city a. Do not cross solid center line b. Do not pass in intersections	5.3.3.1 Several filmstrips and 16MM films are available for use. Refer to the Appendix for listing	Projectors
	5. Parking lot driving a. Speed decreased b. Observing traffic lanes to parking areas c. Extra attention to pedestrians	5.3.3.2 Assign appropriate pages from text and discuss in class	Textbook

Unit Goal 2: To instruct
students in the methods of
dealing with specific
traffic situations

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.3 City traffic - continued	5.3.3 continued 6. Driving on one-way streets a. Proper identification by signs b. Entry maneuvers 1. Signal traffic 2. Adjust lane position	5.3.3.3 Have class discussion on the problems facing drivers when meeting pedestrians and/or bicyclists	Textbook
	3. Observe traffic flow c. Avoidance of wrong way drivers 1. Signal and sound horn	5.3.3.4 Use film "Only One Road" from IMC	16MM projector
	2. Change lanes 3. Anticipate hazard 7. The protection of pedestrians and bicyclists a. 20% of all traffic deaths involved pedestrians b. In majority of fatalities involving bicyclists the bicyclist was at fault c. Being alert to the hazards involved can avoid most accidents d. Increase in numbers of bicycles e. Reduce speed in areas with high concentration of either pedestrian and/or bicyclists	5.3.3.5 Review State Police fatalities reports for pedestrian and bicyclists' deaths - develop a chart showing conditions under which the fatalities occurred	

Unit Goal 2: To instruct students in the methods of dealing with specific traffic situations

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
6.0 The student will be able to describe the correct driving maneuvers used when driving on highways	6.0.1 The I.P.D.E. system as it applies to highway driving (review)	6.0.1.1 Refer to Appendix on film and filmstrips. Several audio visual programs are available for use	
	6.0.2 Safe passing methods for highway driving 1. Identifying passing situations a. Permanent markings b. Time and space requirements c. Safety factors 2. Procedures for passing a. Traffic checks b. Lane positions c. Signal (communications) d. Blind spot checking e. Acceleration f. Smooth lane change g. Mirror check for vehicle passed h. Signal (communicate) i. Return to original lane		

Unit Goal 2: To instruct
students in the methods of
dealing with specific
traffic situations

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
6.0 The student will be able to describe the correct driving maneuvers used when driving on highways	6.0.3 Driving on the expressway 1. Entering/leaving expressways a. Signals b. Speed control c. Description of ramp components d. Courtesy 2. Driving on the expressway/freeway a. Lane position b. Speed control c. Procedures for lane changing d. Handling emergencies e. Night driving	6.0.3.1 Assign appropriate text readings for class discussion purposes	Textbook
		6.0.3.2 Assign pages 46-48 in Driver's Handbook	Handbook
		6.0.3.3 Class may view any of the following films: 1. Driving Highways and Freeways 2. Freeway Driving is Different 3. Freeway Driving - Making Critical Decisions Refer to Appendix for these and other sources	16MM projector
		6.0.3.4 Assign Shell answer book #7, "The Driving Emergencies" for students to read and react	Shell answer series #7

Unit Goal 2: To instruct students in the methods of dealing with specific traffic situations

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
6.0 The student will be able to describe the correct driving maneuvers used when driving on highways	6.0.4 Driving the two-lane highway and country roads 1. Positioning 2. Speed control a. Straight aways b. Curves c. Hills 3. Traffic control clues 4. Accident/Statistics (potential dangers) a. Higher speeds b. On-coming traffic c. Lack of medical aid 5. Hazards encountered a. Slow-moving vehicles b. Farm machinery c. Lack of paved shoulders d. On-coming traffic e. School buses f. Animals g. Older drivers h. Out of state	6.0.4.1 Assign appropriate text readings	Text
		6.0.4.2 Have classes review the State Police fatality sheets to compare accident locations (city/highway)	State Police reports
		6.0.4.3 Have students design charts comparing expressway/highway driving listing advantages and disadvantages of each form of driving	

Unit Goal 3: The student will be able to discuss how physical conditions, emotions, and attitudes affect driving performance

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
7.0 The student will be able to discuss how physical conditions, emotions, and attitudes affect driving performance	7.0.1 How physical conditions affect the driving task 1. Fatigue 2. Illness 3. D.W.I. (review) 4. Eyesight a. Proper sight b. Eyeglasses c. Licensing restrictions d. Color blindness 5. Hearing a. Use of hearing aid b. Licensing restriction 6. Physical disabilities a. Devices available to aid handicapped b. Licensing restrictions c. Handicapped vehicle licenses	7.0.1.1 Have class use brake reaction timer over several days. Students are to test each other and charts kept on reaction times. Discuss how fatigue, driving while intoxicated, illness, etc. can drastically affect reaction time	Brake reaction machine
		7.0.1.2 Use the depth perception test machine to illustrate the importance of depth perception in driving and how unadjusted or corrected vision problems affect depth perception	Depth perception testing machine
		7.0.1.3 Have students check themselves for color blindness	Color blindness test kit

Unit Goal 3: The student will be able to discuss how physical conditions, emotions, and attitudes affect driving performance

Unit IV

Driver Responsibilities

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
7.0 The student will be able to discuss how physical conditions, emotions, and attitudes affect driving performance	7.0.2 How emotions affect the driving task 1. Anger a. Danger of driving when angry b. Increased risk of accident c. Increased speed, reckless driving 2. Other emotions a. Fear b. Anxiety c. Joy 3. Controlling emotions while performing the driving task	7.0.2.1 Use the film "Emotions Affect Driving" as a follow-up activity - use class discussion as a concluding activity	16MM projector

UNIT V

The Driver as a Consumer

- Discusses purchasing decisions.
- Discusses methods of choosing a motor vehicle for purchase.
- Discusses the costs involved in owning and driving a motor vehicle.
- Reviews motor vehicle insurance costs and regulations.
- Discusses maintenance costs.
- Reviews economy measures useful in driving.

Unit Goal: To inform the student of the economics involved in owning and maintaining a motor vehicle

Unit V

The Driver as a Consumer

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 The student will demonstrate knowledge of the factors involved in selecting, purchasing, and maintaining a motor vehicle	1.0.1 The purchase of a motor vehicle 1. Decision to purchase a. Need to purchase b. Funds required c. Where to purchase 2. Choosing a vehicle a. Take time to shop b. What to look for c. The test drive 3. Depreciation of a motor vehicle 4. Operating expenses a. Insurance b. Fuel/oil c. Tires 5. Motor vehicle clubs and their value to a driver a. Costs b. Services c. Benefits	1.0.1.1 Have students make their own vehicle checklists. (Refer to text for further information, Chapter 19 (1977 ed.) or Chapter 17 (1982 ed.) 1.0.1.2 Arrange for a speaker from an automotive dealership to discuss the purchase of a automobile or other motor vehicle* 1.0.1.3 Compare vehicular insurance rates based on coverage. If not done as part of an earlier unit, have the students develop a list of questions for insurance carriers. They then can get actual costs. 1.0.1.4 Speaker from an insurance carrier can be used to instruct students on this phase of vehicle ownership.*	Textbook

*Make certain the speaker knows he is not making a "sales pitch" to the class.

Unit Goal: To inform the student of the economics involved in owning and maintaining a motor vehicle

Unit V

The Driver as a Consumer

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 The student will demonstrate knowledge of the factors involved in selecting, purchasing, and maintaining a motor vehicle	1.0.2 Maintaining a motor vehicle 1. Preventive maintenance a. External components b. Internal components c. Maintenance schedule d. Tire care	1.0.2.1 Invite an automotive mechanic to speak to classes on the care and maintenance of motor vehicles	
		1.0.2.2 Assign Chapter 18 (both ed.) to read and react to	Textbook
	1.0.3 Economic driving 1. Driving for gas mileage a. Good practices 1. Moderate speed 2. Smooth acceleration 3. Tuned engine 4. Braking procedure b. Wasteful practices 1. Racing the engine 2. High speed 3. Squealing the tires 4. Riding the clutch 5. Improper warm-up	1.0.2.3 Several films/filmstrips are available for use that are pertinent to this unit. Please refer to the Appendix for a listing	16MM Projector

SECTION II

RANGE DRIVING INSTRUCTION

SECTION II

Range Driving Instruction

INTRODUCTION

Frederick County offers driver education students a multi-car range instruction program as part of the overall driver education course. A minimum of eight clock hours of range instruction is provided to students, excluding those few students who, because of unusual circumstances, receive six hours of road experience training. Instruction on the multi-car range is provided to students by either a teacher or qualified laboratory instructor.

It should be noted that the "ideal" range program covers twenty class periods. Two students are assigned to each vehicle, each actually operating the vehicle for ten class periods and observing for ten class periods. State requirements can be met with a ten-day range where only one student is asssigned per vehicle. A ten-day range provides no observation time for the student driver. Regardless of class periods involved, a complete range program must include eight clock hours of time in order to meet Maryland state standards.

The range lessons which follow are not necessarily of a one-period length! The basic principles of some driving maneuvers can be taught in a few minutes; however, to become proficient in driving, students will require practice time for each maneuver. The practice time allowed students is a large determinant on successful completion of the program.

In certain situations, individual students can be excused from the range program. When this occurs, the students must be given a minimum of six clock hours of road driving experience.

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Section Goal: To properly
instruct the student driver
in the operation and
handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 The student will become familiar with those operational procedures regarding the preliminary operation of a motor vehicle on the range	1.0.1 Specific instructions given to students regarding the daily operations of the driving range, the range rules, and safety precautions		
	1.0.2 Students do pre-entry check of vehicle 1. Exterior of vehicle 2. Under hood (engine) 3. Interior of hood	1.0.2.1 Students examine the exterior of vehicles	Driver Education vehicles
		1.0.2.2 Students examine the different types of engines used in range vehicles	
	1.0.3 Students are instructed in the pre-ignition checks and the location of the vehicle controls	1.0.3.1 Students are placed in the vehicle and go through all pre-ignition procedures	
	1.0.4 Students are taught the procedures for starting a vehicle	1.0.4.1 All range students start vehicles - repeated several times. Vehicles are not moved	

Section Goal: To properly
instruct the student driver
in the operation and
handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 continued	1.0.5 Students are taught the importance of securing a vehicle	1.0.5 Students shut down engines - leave and secure the vehicle	
		Additional: Students check fluid levels in engine - especially oil level - the instructor will demonstrate how to check transmission fluid	Paper towels and trash bag
		1.0.6 Chapter 6 (Driver Handbook) may be assigned for homework	Driver Handbook (each student issued one)

Section Goal: To properly instruct the student driver in the operation and handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
2.0 The student will demonstrate his/her ability to put a vehicle in motion both forward and backward	2.0.1 Review of pre-ignition checks. (All students will do pre-ignition checks every time they drive a vehicle)	Actual in-car activity	Range vehicles Traffic cones
	2.0.2 The Smith System is reviewed: 1. Aim high in steering 2. Keep eyes moving 3. Get the overall picture of traffic 4. Make certain you are seen 5. Have an escape route		
	2.0.3 Instruction of hand position 1. 3-9 2. 10-2 3. Palm steering (reversing)		
	2.0.4 Vehicles started and students drive forward a few feet and stop the vehicle	Actual in-car activity	
	2.0.5 Students drive forward to a given point 1. Braking 2. Acceleration		

Section Goal: To properly
instruct the student driver
in the operation and
handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
2.0 continued	2.0.6 Students are taught body position for backing vehicle	Actual in-car activity	
	2.0.7 Students start vehicle and back vehicle to original position of 2.0.4	Actual in-car activity	Range vehicles Cones Standards
	2.0.8 Repeat 2.0.5 and 2.0.7	Actual in-car activity	

Section Goal: To properly instruct the student driver in the operation and handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
3.0 The student will demonstrate ability to move a motor vehicle forward while doing a serpentine (weaving) maneuver	3.0.1 Review of moving a vehicle forward and in reverse 1. Judging distance 2. Keeping wheels in straight line	Actual in-car activity	Range vehicles Traffic cones Standards
	3.0.2 Students introduced to hand-over-hand steering while moving vehicle in a weaving maneuver 1. Direction recovery 2. Control of speed	Actual in-car activity	
	3.0.3 Students will begin to follow each other while maintaining a safe following distance	Actual in-car activity	

Section Goal: To properly instruct the student driver in the operation and handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
4.0 The student will demonstrate his/her ability to successfully maneuver a motor vehicle in both left and right hand curves	4.0.1* Instruction given student on maintaining lane position 1. Straight aways 2. Curves	In-car activity	Range vehicles Traffic cones
	4.0.2 Instruction given students on braking the vehicle in negotiating curves. Student maneuvers motor vehicle	In-car activity	
	4.0.3 Instruction given students on acceleration procedures used while negotiating curves	In-car activity	
	4.0.4 Instruction given students on maintaining speed of vehicle while driving in a curve. Students maintain vehicle speed while maneuvering curves		
	4.0.5 Review of the backing-up driving skills 1. Body position 2. Steering 3. Traffic checks 4. Palming the wheel	In-car activity	

Section Goal: To properly instruct the student driver in the operation and handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
4.0 continued	Students maneuver the vehicle through a curve while backing up *Instructor will check that the student performs all pre-ignition procedures prior to moving the vehicle Note: Proper driving procedure while reversing will be reviewed prior to any reversing activity on the range. Particular attention is to be paid to headchecks, hand position, and body position.	In-car activity	Range vehicles Traffic cones Standards

Section Goal: To properly instruct the student driver in the operation and handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
5.0 The student will successfully complete a figure 8 driving maneuver*	5.0.1 Students will complete the figure 8 maneuvering pattern using skills already learned, including: 1. Following distance 2. Hand-over-hand steering 3. Maintaining lane position 4. Hand position on steering 5. Acceleration control 6. Braking control	In-car activity	Range vehicles Traffic cones

Note: This activity is not suited for all Frederick County ranges. Adjustments of maneuvers will be made accordingly.

Section Goal: To properly instruct the student driver in the operation and handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
6.0 The student will demonstrate ability to maneuver a motor vehicle through a traffic intersection*	6.0.1 Instruction given on proper traffic checks used when approaching an intersection 1. Lane position 2. Mirror checks 3. Signals 4. Eye movement 5. Controlled braking	In-car activity	Range vehicles Traffic cones
*one-way intersections	6.0.2 Instruction given on proper methods used in making 90 degree turns (left or right) 1. Lane position 2. Hand over hand steering 3. Wheel recovery 4. Tracking 5. Right-of-way to other vehicles 6. Speed control		

Section Goal: To properly instruct the student driver in the operation and handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
7.0 The student will successfully demonstrate the maneuvers necessary to negotiate turns at two-way intersections*	7.0.1 Review of lesson 6.0 7.0.2 Instruction given on the maneuvers necessary to make turns at a two-way intersection 1. Traffic checks 2. Signals 3. Right-of-way rules 4. Utilization of other previously learned driving activities		Range vehicles Traffic cones

*On those ranges where this maneuver is applicable

Section Goal: To properly
instruct the student driver
in the operation and
handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
8.0 The student will demonstrate the ability to park a motor vehicle in a perpendicular manner, both by pulling into, or backing into the parking space*	8.0.1 Instruction given on proper signaling procedures		Range vehicles Traffic cones Stanchions
	8.0.2 Instruction/review given on importance of traffic checks 1. On-coming traffic 2. Vehicles on left 3. Vehicles on right		
*Perpendicular parking instruction also covers the same procedures required to park in a garage	8.0.3 Instruction given on the proper procedures to park a vehicle in a perpendicular space 1. Lining the vehicle (5x5) 2. Centering the vehicle 3. Straightenng the wheels 4. Steering maneuvers 5. Body position for backing the vehicle		
	8.0.4 Instruction given on proper maneuvers required to leave a perpendicular parking space 1. Traffic checks 2. Backing out 3. Positioning vehicle 4. Tracking	Students will repeatedly practice both maneuvers	

Section Goal: To properly instruct the student driver in the operation and handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
9.0 The student will successfully demonstrate the maneuvers required to properly park a motor vehicle in an angle parking space	9.0.1 Review of the procedures used in lesson 8.0 1. Traffic checks 2. Signaling 3. Lining up the vehicle 4. Hand-over-hand steering 5. Straightening the wheel		Range vehicles Traffic cones Stanchions
	9.0.1 Review of the procedures used in backing a vehicle out of a space 1. Traffic check 2. Body position 3. Steering maneuvers 4. Straightening wheels 5. Centering the car		
		Students practice maneuvers	

Section Goal: To properly instruct the student driver in the operation and handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
10.0 The student will successfully demonstrate the ability to park a motor vehicle in a parallel parking space	10.0.1 Review of all procedures used in lessons 8 and 9* *Note: There are several good methods for parking a vehicle in a parallel space. It is left to the discretion of the individual instructor as to which method he/she uses to teach students parallel parking. What is basic to safe parking are the traffic checks, signals and body positions in which students have already been instructed.	Students should practice this maneuver as often as possible. They should spend portions of several days practicing parallel parking	Range vehicles Traffic cones Stanchions

Section Goal: To properly instruct the student driver in the operation and handling of a motor vehicle

Section II

Range Driving Instruction

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
11.0 The student will demonstrate the ability to maneuver a motor vehicle in two-way traffic	11.0.1 This is a culminating range activity in which students practice all of the basic maneuvers taught during the range driving experience portion of the driver education course. Attention should be paid to: 1. Following distances 2. Proper signals 3. Behavior at intersections 4. Driver courtesy 5. Traffic checks 6. Speed control 7. Braking control	In-car activity	

SECTION III

ROAD DRIVING EXPERIENCE

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SECTION III

Road Driving Experience

INTRODUCTION

During this section of the driver education program the student driver is exposed to actual traffic conditions. He/she will be expected to successfully maneuver an automobile in a variety of locations and situations.

In order to assist the instructor in making this portion of the driving experience more meaningful to the student driver, a list of safeguarding precautions is placed at the beginning of the section. It is hoped that by utilizing the suggestions contained in the list that the instructor will be able to guide the student drivers safely through this aspect of their training.

SECTION III

Tips on Safeguarding the Student Driver During the Road Driving Experience

There are a number of precautions that should be taken with student drivers that can aid in avoiding difficult driving situations for them. Some of these precautions are:

1. Plan your route! Know where you wish the student to drive and be certain the student knows where to drive and what is expected of him/her.
2. For the first-time driver, plan quiet routes. It is not a good idea to expose a first-time driver to heavy traffic situations. Save those experiences for the last road driving session the student will have.
3. Keep vehicle speed low during the first session. This allows the student more time to react to situations (I.P.D.E.) and permits a little "cushion" of time in case an unexpected hazard appears.
4. Look and think ahead of the student driver. Give directions well in advance of the time you want the student to make a maneuver.
5. Keep the level and tone of your voice as low as possible.
6. Use the instructor's mirrors for traffic and eye check.
7. Practice stops and turns on quiet streets and roads until the student is familiar with the vehicle.
8. Whenever possible, have the student driver do all his/her road experience driving in the same vehicle.
9. Be positive in correcting errors. Have students repeat maneuvers until they are comfortable with them. Expect mistakes! Student drivers are nervous and have a tendency to oversteer, turn too wide, and drive too slowly.
10. Unless a true emergency exists, never take control of a vehicle and drive it and the student driver back to school.
11. Praise good maneuvers. This is a great reward to student drivers.
12. When a student driver becomes confused or rattled, take a short break. Stop the vehicle for a few minutes (always in a safe area), talk the situation over, offer encouragement, and gently urge the student driver to continue the lesson. Confidence building is an important aspect of the road driving experience.

Section Goal: To prepare the student for the safe handling of a motor vehicle in actual traffic conditions

Section III

Road Experience Driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0	1.0.1		
The student will demonstrate competency in driving in traffic in a variety of situations including: driving in city traffic; driving on an expressway; the safe overtaking and passing of other motor vehicles; proper handling of a motor vehicle at controlled intersections; and proper observance of traffic control devices, signals, and lane markings	Driving in traffic 1. Pre-ignition checks completed 2. Observance of traffic a. I.P.D.E. used b. Smith System used 3. Left and right hand turns in real situations a. Signals b. Lane positions c. Speed control d. Smooth braking control e. Hand-over-hand steering f. Safe recovery following turn 4. Entering/departing expressways a. Signals used b. I.P.D.E. used c. Smooth acceleration/ deceleration d. Proper lane positioning e. Smooth braking	In-car driving	Road vehicles Student check sheets

Section Goal: To prepare the student for the safe handling of a motor vehicle in actual traffic conditions

Section III

Road Experience Driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 continued	1.0.1 continued		
	5. Expressway driving	In-car driving	Road vehicles
	a. Maintaining speed		
	b. Traffic checks		Student check sheets
	c. Overtaking/passing other vehicles		
	1. Lane position		
	2. Acceleration		
	3. Recovery		
	d. Observance of markings, signs, and signals		
	6. Highway driving		
	a. Lane position		
	b. Traffic checks (I.P.D.E.)		
	c. Observance of markings, signs, and signals		
	d. Smooth acceleration/ deceleration		
	e. Proper signals/ communication given when approaching traffic, passing traffic, or being overtaken by traffic		
	f. Smooth braking of vehicle		

Section Goal: To prepare the student for the safe handling of a motor vehicle in actual traffic conditions

Section III

Road Experience Driving

Unit Lesson Objectives	Lesson Content	Suggested Activities	Resources/Equipment Needed
1.0 continued	1.0.1 continued		
	7. Driving in city traffic	In-car driving	Road vehicles
	a. Traffic checks (I.P.D.E.)		Student check sheets
	b. Maintaining lane position		
	c. Observance of traffic signals		
	d. Signals/communication to other drivers		
	e. Hand-over-hand steering on turns		
	f. Proper recovery from turns		
	g. Proper brake use		
	1. Not riding the brake		
	2. Avoidance of panic stops		
	3. Smooth braking		
	h. Maintaining composure		

APPENDICES

APPENDIX A

The Use of Motion Picture Films in the Driver Education Classroom

The majority of motion picture films dealing with topics in driver education are sound, well-produced pictures that can be of value in the classroom. The proper utilization of a motion picture can: stimulate class discussion, clarify textbook readings, reinforce teacher presentations, cause students to think. All of these results are desirable educational goals.

On the other hand, improper use of a motion picture wastes time. Students get little value from viewing the film and the message of the film is lost. Showing a film, just to show a film, is poor teaching.

Guidelines for using motion pictures as educational tools:

1. Do not overuse films. Excessive dependence on films is poor teaching.
2. Preview all films which are to be used with students. This enables you to be familiar with the content which, in turn, will allow you to alert the students to sections of the film that are pertinent to classwork.
3. Stop the film! There is no rule that once a film is running it cannot be stopped. Often, stopping the film just prior to its coverage of a topic you want your class to pay close attention to helps to "zero in" the students' attention to the topic. You can have a brief discussion as to what you want your class to see.
4. Have students take notes!
5. Do not use a film that takes the entire class period to show. You need time for discussion both before and after the film.
6. Be certain the film is topical. There is little value in showing a film on the components of the internal combustion engine if your class has been studying the affects of alcohol on reaction time.
7. Schedule ahead! Know your subject and allow enough time for ordering films.
8. List on the chalkboard or on handouts all the points for which you wish your students to look. Emphasize the major reason you are showing the film.
9. Question the students. Make certain the class gained the information you wished them to gain.
10. Refer to the film in later class discussions. If a film is important enough to use as a classroom instructional aid, it's important enough to refer to in later discussions on the topic.

APPENDIX B

GUIDES FOR WRITING TEST ITEMS

Multiple Choice

1. If the student is required to select the best answer, be sure that there is only one answer that is clearly the best.

2. Write the test item so that most of the words are in the stem, not in the option.

3. Avoid the use of negative expressions both in the stem and in the options, especially in the distractors.

4. All test options should be reasonable and practical.

5. The length of the test options should not relate to the correctness of the option (the correct option should not be noticeably shorter or longer than other options).

6. The number of test options should be either three or four.

7. Make all of the test options grammatically consistent.

8. Order the options within a test item in some logical sequence (i.e., alphabetical, numerical).

9. Avoid having options such as: NONE OF THE ABOVE or ALL OF THE ABOVE.

True-False

1. Write items that are true or false without additional qualifiers. Do not use true-false items where the item could be considered true (or false) under certain circumstances, unless the circumstances are identified in the statement.

2. Keep true-false statements short and confined to one idea.

3. Make sure that there is no pattern to your answers. Vary the amount and order of the true and false statements both within one test and across all tests.

4. Avoid the use of the following words in false statements as they may give the answer away to the student who does not know the correct response: only, never, all, every, always, no, and none.

5. Avoid the use of the following words in true statements as they may give the answer away to the student who does not know the correct response: usually, generally, sometimes, customarily, often, may, could, and frequently.

Matching

1. The list of premises and responses can be equal or unequal in length.
2. The lists of premises and responses should be as homogenous as possible. Avoid mixing the content within a list.
3. Indicate very clearly in the directions how the matching is to be done.
4. Arrange the premises and responses in a logical order.
5. Be sure to include responses that do not match any of the premises.
6. Keep the list of premises and responses fairly short (about ten items in each list).

Completion

1. Design the question or statement so that there is only one correct answer.
2. Do not take statements or sentences directly from another source.
3. Do not break up a sentence by removing words and substituting blanks to the point where the meaning of the sentence is lost.
4. Put the blank or blanks at the end rather than the beginning of a sentence.
5. Leave enough room for the student to write in the correct response.
6. Do not include unnecessary hints, such as the beginning letter of the missing word(s).
7. Always inform the student as to the units (inches, pounds, centimeters) in which the answer is to be expressed.

Short Answer and Essay

1. Be very clear in the question. Identify exactly what you want the student to respond to and in what type of detail. Do not ask broad, ambiguous questions.
2. Compile a list of exactly what is required in the student's answer. Write down all major and minor points that should be covered. Use this list in grading each answer.

APPENDIX C

The following are excerpts from Maryland State By-law 139.04.03.01 Subtitle 04 Chapter 03:

Driver Education in Maryland Public and Non-Public Schools. These excerpts are included for your information.

Title 13A
STATE BOARD OF EDUCATION

Subtitle 04 SPECIFIC SUBJECTS

Chapter 03 Driver Education in Maryland Public and Non-Public Schools

Authority: Education Article, §2-205(h), Annotated Code of Maryland

.01 Applicable Laws.

A. The State Department of Education is authorized to assume full responsibility for those provisions:

(1) Specified for the chief state school officer under the federal highway safety act of 1970;

(2) Contained in Education Article, §§7-412 and 7-412.1, Annotated Code of Maryland; and

(3) Pertinent to Maryland public and non-public schools contained in Transportation Article, §§16-501—16-509, Annotated Code of Maryland.

B. The content of these provisions may be found in generally available publications, so, pursuant to Article 41, §256H(a), the texts of the provisions will not be reprinted in the Code of Maryland Regulations.

.02 Definition of Terms.

A. "Classroom instruction" means classroom instructional activities providing for the safe and efficient operation of the automobile.

B. "Classroom instructor" means a certificated and authorized person who is approved to provide classroom, simulation, multiple-car-range, and behind-the-wheel on-road instruction.

C. "Clock hour" means a period of instruction equaling 60 minutes.

D. "Completed student" means a person who participates in an approved driver education course and meets minimum classroom and laboratory time requirements established by regulation.

E. "Driver education course" means a course of instruction that provides for classroom and laboratory instruction.

F. "Driver education instructor authorization card" means approval for a person to render instruction either as a classroom instructor or a laboratory instructor.

G. "Driver education laboratory instructor's permit" means verification that a person has met minimum academic qualifications for a driver education laboratory instructor as specified by school regulation.

H. "Driving simulator" means an approved driver education instructional device approved for the substitution of behind-the-wheel instruction.

I. "Incomplete student" means a person who does not meet driver education course time requirements as established by regulation.

J. "Integrated driver education course" means a driver education course which is scheduled so as to provide both classroom and laboratory instruction in a correlated manner.

K. "IPDE" (identify, predict, decide, execute) means an acronym used to provide a correlated instructional format to driver education students.

L. "Laboratory instruction" means instructional activity conducted in a driving simulator, on a multiple-car-range, or on-road in a driver education vehicle.

M. "Laboratory instructor" means a person who has met academic requirements established by school regulation and who is authorized to render simulation, multiple-car-range, and on-road behind-the-wheel instruction.

N. "Multiple-car-range" means an approved off-street facility specifically designed to provide driving instruction.

O. "Sponsor school" means a non-public school which is responsible for affording students within the school an opportunity to participate in a driver education course approved by the State Department of Education.

P. "Student performance requirements" means the minimum competencies required by driver education students in order to quality for successful course completion.

Q. "Successful course completion" means criteria relative to student performance requirements and minimum time requirements established by regulations.

R. "Week" means a minimum of 5 established or regular school days and a maximum of 7 calendar days.

.03 Academic Credit Given by Local Education Agencies.

Local education agencies are permitted by the State Board of Education to award up to ½ hour of academic credit to only those students who successfully complete a driver education course administered by the State Department of Education. Academic credit may not be awarded if a student fee is charged for a driver education course offered during the established school year.

.04 Program Course Availability and Approval Requirements.

A. Driver Education Program Availability.

(1) Each public school or school system under the jurisdiction of the State Board of Education or the Board of School Commissioners of Baltimore City may provide each eligible student (see Regulation .05, below) within the respective school or school system with the opportunity to participate in a complete course of driver education approved by the State Department of Education before the student's initial licensing age. If a public school or school system provides a driver education course, the course shall consist of at least 30 hours of classroom instruction and 6 hours of laboratory instruction and shall be conducted in compliance with rules and regulations adopted by the State Board of Education.

(2) Each non-public school, which provides students within the respective non-public school with the opportunity to participate in a driver education course, shall provide the students with the opportunity to participate in a driver education course approved by the State Department of Education.

B. Public School Course Offering Responsibility. Each public school system (local education agency) may establish and maintain State Department of Education approved driver education courses which are capable of accepting those persons who are eligible for a driver education course (see Regulation .05 below).

C. Non-public School Course Availability Responsibility. Each non-public school which provides eligible students enrolled in the respective school or school system with the opportunity to participate in a driver education course shall meet this responsibility in one of three ways:

(1) The "sponsor" school may establish a driver education course offering which is approved by the State Department of Education within the "sponsor" school;

(2) The "sponsor" school may make arrangements with another school or school system under the jurisdiction of the State Board of Education or the Board of School Commissioners of Baltimore City to offer a driver education course which is approved by the State Department of Education within the "sponsor" school;

(3) The "sponsor" school may make arrangements with another school or school system under the jurisdiction of the State Board of Education or the Board of School Commissioners of Baltimore City so that "sponsor" school students may attend the respective school or school system to participate in a driver education course which is approved by the State Department of Education.

D. Approval for Driver Education Course Offerings Provided in Maryland Public and Non-public Schools. Any school or school system under the jurisdiction of the State Board of Education or the Board of School Commissioners of Baltimore City which offers a driver education course shall maintain an approved status from the State Department of Education. The chief school official from the school or school system, or his designated representative, shall make application to the Driver Education office of the State Department of Education for a driver education course offering approval. Upon determining that the school or school system is capable of offering a driver education course which complies with those regulations promulgated by the State Board of Education for driver education course offerings, the State Superintendent of Schools may approve subsequent driver education courses provided by the school or school system. This approval will be valid for 1 year unless otherwise voided by the State Superintendent of Schools.

.05 Student Eligibility Requirements.

Any 15-, 16-, or 17-year old youth who meets those mental and physical standards established by the Motor Vehicle Administrator for the issuance of a Maryland driver's license, and who is a Maryland resident or is a student who is currently, or was in the previous term, enrolled in a course offering other than driver education in a Maryland public or non-public school, may enroll in a driver education course approved by the State Department of Education under the provisions given below:

A. When Fee Permitted.

(1) A student fee may be charged for any driver education program or portion of a program offered outside of the established school day or school year. The fee charged plus the State reimbursement may not exceed the lesser of:

(a) 110 percent of the per-student-course cost reported for the previous year by the school or school system in which the course is being taken; or

(b) The projected per-student-course cost for the current year.

(2) If a complete program is offered during the established school day, then the provisions of §§B, C, and D shall apply.

(3) Nothing within this regulation prevents a school or school system from offering a "tuition-free" program to persons provided for in §§C and D of this regulation. However, State reimbursement may not be paid for students provided for under §D.

B. Tuition-Free Course.

For programs subject to the provisions of §A(2) a person may enroll in a "tuition-free" course (total course costs for the student will be borne with funds from the public school system in which the student is, or recently was, enrolled, or State reimbursement, or both) if, on the first day the course is conducted, the student:

(1) Is currently, or in the previous term has been, enrolled in course work other than driver education in the public school or public school system which is offering the driver education course;

(2) Has never been afforded the opportunity to participate in a "tuition-free" course of driver education by the public school system in which the student is enrolled;

(3) Has never participated in a course of driver education approved by the State Department of Education or the Motor Vehicle Administration.

C. Partial Fee Course.

(1) For programs subject to the provisions of §A(2), a person who is not eligible under §B(1), above, may enroll in a "partial fee" course if, on the first day the course is conducted, the student has never participated in a course of driver education approved by the State Department of Education or the Motor Vehicle Administration.

(2) Total course costs for the student may be borne by a fee assessed to the student or State reimbursement, or both. Any fee assessed to the student, when combined with State reimbursement, may not exceed 110 percent of the per-student-course cost reported for the previous year by the school or school system in which the course is being taken.

D. Total-Fee Course. For programs subject to the provisions of §A(2), a person who is not eligible under §§B(1) or C(1) above may enroll in a "total-fee" course. Total course costs for the student may be borne by a fee assessed to the student. Any fee assessed to the student may not exceed 110 percent of the per-student-course cost reported for the previous year by the school or school system in which the course is being taken.

(See page 96)

.06 Student Performance Requirements.

Before receiving a grade for satisfactory course completion, a student shall satisfy the following student performance requirements:

A. Exterior preliminary check:

(1) Short trip—lights, signals, tires, visible leaks, cleanliness of light lenses, and glass areas;

(2) Extended trip—coolant, battery, power steering, transmission, belts, pulleys, jack, emergency equipment.

B. Interior preliminary check:

(1) Demonstrate a knowledge of adjusting equipment and safety devices such as seat, seat belts, and mirrors;

(2) Demonstrate proper starting procedures;

(3) Demonstrate the ability to read and comprehend gauges such as fuel, oil pressure, temperature, and alternator gauge or light;

(4) Demonstrate securing procedures for leaving the vehicle.

C. Basic control of motion and direction:

(1) Demonstrate starting, moving, and stopping in a straight line;

(2) Demonstrate smoothness of operation and desired rate of acceleration and deceleration;

(3) Demonstrate handling curves, initiating arcs, correcting and recovering from arcs;

(4) Develop an understanding of tracking.

D. Maneuvers (backing, turnabouts, intersection turns, angle parking, parallel parking, perpendicular parking, changing lanes, passing, entering and exiting acceleration and deceleration lanes).

E. Apply in a variety of highway traffic situations learned information about traffic laws and regulations, vehicle capabilities, and limitations related to the laws of nature, highway environmental factors, and laws established by man:

(1) Traffic laws and regulations (Maryland Driver Handbook)—signs, signals, road markings, right-of-way requirements, and speed;

(2) Limitations or capabilities of man and machine in a driving environment;

(a) Natural laws.

(b) Relationship of the vehicle and environment in context with the IPDE concept.

F. Identify and apply the human functions and necessary perceptual skills required to make appropriate responses in traffic situations:

(1) Identification process:

(a) Aggressive visual search patterns;

(b) Selective seeing habits.

(2) Prediction Capabilities. Assess risk in terms of probability, closing rate, and collision potential.

(3) Decision Making. Manage time and space by appropriate use of speed and effective use of distance.

(4) Execution. Select and properly timed braking, steering, and accelerating.

(5) Total interrelatedness of the functions.

G. Describe (apply if possible) the special procedures for performing the driving task in adverse environmental conditions such as reduced vision and limited traction.

H. Identify and assess the influence of a variety of psychological, social, and physical factors which can facilitate or inhibit the human functions required in driving:

(1) Effects of alcohol (and other drugs) upon driving performance and define preventive measures;

(2) Negative stresses and compensatory measures associated with physical, mental (emotional), and social conditions as they relate to driver performance.

I. Describe (demonstrate where facilities exist) the correct techniques for coping with critical situations:

(1) Interpret critical events that require evasive action and describe applicable maneuvers;

(2) Respond appropriately to the situations caused by mechanical failures and environmental limitations (off-road recovery, blowout, brake failure, etc.).

J. Identify and interpret the overall function of the highway transportation system:

(1) Student identification of his various roles in the highway transportation system;

(2) Student identification of methods of preparing himself, his vehicle, and his environment for travel (short and long);

(3) Student identification of the supportive efforts designed to improve the highway transportation system.

.07 Student Grading Requirements.

Each school or school system which offers an approved driver-education course shall be responsible for issuing one of three fundamental grades for each student participating in the course. Upon completion of the course, each student shall receive one of the three following grades:

A. Successful course completion (P or A, B, C, D). This grade will be issued if the student can satisfy minimum student performance requirements (see regulation on student performance requirements) and has participated in a course which meets minimum course time requirements (see regulation on time requirements). If the student successfully completes the course, a driver education certificate should be issued to the student.

B. Unsuccessful course completion (E or F). This grade should be issued if the student has met the minimum course time requirements (see regulation on time requirements), but cannot satisfy minimum student performance requirements (see regulation on student performance requirements). If the student does not successfully complete the course, a driver education certificate should not be issued.

C. Incomplete (I). If a school or school system makes a complete approved course available to a student within 6 months and the student cannot (excused absences) complete the minimum course time requirements (see regulation on time requirements), an incomplete grade should be issued. A driver education certificate should not be issued. In situations where the student desires to fulfill the course requirements, make-up learning experiences should be provided which will enable the student to complete the course time and course content requirements for successful course completion. This make-up instruction should be provided within 6 months after the initial course offering is finished (see regulation on course—student time requirements). Upon satisfactory completion of the make-up experiences, the student may be issued a driver education certificate.

Make-up instruction time may not be subject to 6-month maximum time limitations contained in Regulation .09A. below.

.08 Instructional Personnel Requirements.

A. Classroom Instructor. A classroom instructor is a person who renders classroom, simulation, multiple-car-range, and on-road behind-the-wheel instruction in a driver education program sanctioned by the State Department of Education and who meets the following requirements:

(1) Eligibility for a professional certificate.

(2) Holds a Bachelor's Degree from a regionally or State accredited institution. and as part of the Bachelor's Degree or in addition to the degree, has at least 18 semester hours of credit in driver education distributed as follows:

(a) 12 semester hours of credit as specified in the following fields with at least one 3 semester hour course in each area:

(i) The highway transportation system and the driving task;

(ii) Driver education curriculum development, modification, implementation;

(iii) Simulation and on-road behind-the-wheel instruction in driver education programs;

(iv) Multiple-car-range instruction and driver education program administration and supervision.

(b) 6 semester hours selected from:

(i) Accident causation and prevention;

(ii) Alcohol and traffic safety;

(iii) Student teaching in driver education;

(iv) Traffic law or traffic engineering.

B. Laboratory Instructor.

(1) A laboratory instructor is a person who renders simulation, multiple-car-range, and on-road behind-the-wheel instruction in a driver education program sanctioned by the State Department of Education and who meets the following requirements:

(a) Holds a high school diploma or the equivalent. and has completed a State approved program in driver education including:

(i) The highway transportation system and the driving task.

(ii) Simulation instruction in driver education, multiple-car-range and on-road behind-the-wheel instruction,

(iii) Internship in driver education;

(b) Has completed college credit as outlined in §A(2), above; or

(c) Presents any combination of courses selected from §A(2) and the subject areas of §B(1)(a)(i), (ii), and (iii), above, that would be equivalent to the State approved program for the laboratory instructor.

(2) The initial laboratory instructor permit is issued for a 5-year period and renewed for a 5-year period. Subsequent renewals are for 10 years. Renewals may be issued at the request of the local superintendent or the principal of the non-public school, as appropriate, without the earning of additional credits.

C. Procedures to Acquire a Driver Education Classroom-Instructor Endorsement or a Driver Education Laboratory Instructor Permit.

(1) Driver Education Classroom Endorsement Procedure. A person who wishes to obtain a driver education classroom instructor endorsement may make application to the Division of Certification and Accreditation of the State Department of Education. Upon making a determination that the person has successfully completed appropriate course work which will satisfy the requirements specified for a driver-education classroom instructor as set forth in COMAR 13.07.01.07, Requirements for Certification for Administrators, Supervisors, and Teachers, the State Superintendent of Schools may endorse the person as a driver education classroom instructor.

(2) Driver Education Laboratory Permit Procedure. A person who wishes to obtain a driver education laboratory instructor permit may make application to the Division of Certification and Accreditation of the State Department of Education. Upon making a determination that the person has satisfied the requirements specified for driver education laboratory instructors as set forth in COMAR 13.07.01.07, the State Superintendent of Schools may provide the person with a driver education laboratory instructor permit.

D. Procedures for Conducting a Maryland State Department of Education Approved Program (Workshop) For the Preparation of Driver Education Laboratory Instructors. If a program (workshop) for the preparation of driver education laboratory instructors is to receive approval by the State Department of Education, the following requirements shall be met:

(1) Each prospective candidate who is accepted to participate in the program shall be at least 21 years old, have for 3 consecutive years before entering the program been licensed (in an appropriate classification) by a State agency and maintained an adequate record as a motor vehicle operator, and have successfully completed the requirements for a high school graduation certificate or its equivalent.

(2) The local education agency which desires to offer a program (workshop) for the preparation of driver education laboratory instructors shall make an application to the State Department of Education in compliance with those provisions set forth in the "Guidelines for Procedure and Approval of Inservice Programs." Successful completion of this special program (workshop) will qualify the laboratory instructor candidate for a driver education laboratory instructor permit. The program (workshop) application should reflect the following four parts:

(a) Part one of the program should be based on the highway transportation system and the driving task, with a primary emphasis on those human functions required to successfully perform the driving task. This part of the program should consist of not less than 50 hours, during which each candidate should be provided with the opportunity to participate in classroom, simulation, multiple-car-range, and on-road behind-the-wheel instruction. Each candidate in part one of this program should be evaluated over a period of not less than 1 hour of behind-the-wheel instruction to determine if the candidate can adequately perform the driving task in routine and emergency driving situations. The simulated emergency driving situations used for evaluation should include at least a 25 MPH "serpentine" exercise and a 25 MPH evasive ("decision barrier") maneuver exercise.

(b) Part two of the program should be designed so as to prepare each candidate participating in the program with those abilities needed to instruct in a driver education simulation laboratory. This part of the program should consist of not less than 50 hours, during which each candidate should be provided with those classroom and laboratory learning experiences necessary to prepare each candidate as a driver education simulation instructor. Each candidate in this part of this program should be evaluated over a period of not less than 2 hours of actual simulation teaching with beginning teenage driver education students to determine if the laboratory instructor candidate can adequately render simulation instruction.

(c) Part three of the program should be designed so as to prepare each candidate participating in the program with those abilities needed to instruct on a driver education multiple-car-range or on-road in a driver education vehicle. This part of the program should consist of not less than 50 hours, during which each candidate should be provided with those classroom and laboratory learning experiences necessary to prepare each candidate as a driver education multiple-car-range instructor or as a driver education on-road behind-the-wheel instructor. Each candidate in this part of this program should be evaluated over a period of not less than 2 hours of actual multiple-car-range teaching and 2 hours of actual on-road behind-the-wheel teaching with beginning teenage driver education students to determine if the laboratory instructor candidate can adequately render multiple-car-range and on-road behind-the-wheel instruction.

(d) Part four of the program should be designed to prepare each candidate participating in the program with those abilities needed to assume the role of a fully qualified laboratory instructor. This part of the program should consist of not less than 180 hours of "intern" teaching experiences (for each candidate) conducted over not less than 9 weeks. During this time, each candidate should be provided with a distributed "intern" teaching experience in simulation, multiple-car-range, and on-road behind-the-wheel instruction with beginning driver education students in a program sanctioned by the State Department of Education.

E. Procedures for Issuing an Instructor Authorization Card to a Driver Education Classroom Instructor, a Driver Education Laboratory Instructor, or an Instructor Candidate Participating in an Approved Driver Education Instructor Preparation Program.

(1) Any person who serves as an instructor in a driver education program sanctioned by the State Department of Education shall possess a valid instructor authorization card issued by the State Department of Education. Any person 21 years old or older who wishes to obtain an instructor authorization card should make application to the driver education office of the State Department of Education. Upon receiving an application for an instructor authorization card, the following will be reviewed:

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(a) The applicant's previous driving record will be reviewed to determine if the applicant has held a valid motor vehicle operator's license (of an appropriate classification) for a 3-year period before making application, and to determine if the applicant has maintained an adequate driving record.

(b) The applicant's academic record will be reviewed to determine whether the applicant has satisfied the requirements for a driver education classroom instructor endorsement, or a driver education laboratory instructor permit, or is currently participating in an approved program for the preparation of driver education instructors.

(c) The applicant's background will be reviewed to determine whether the applicant has met the intent of Education Article, §6-202.

(2) Upon making a determination that the applicant has satisfied the requirements specified in this regulation, the State Superintendent of Schools may provide the applicant with an instructor authorization card. In cases where the applicant does not hold a driver education classroom instructor endorsement or a driver education laboratory instructor permit, the State Superintendent of Schools may issue a temporary instructor authorization card to an individual instructor candidate who is participating in a driver education instructor preparation program sanctioned by the State Department of Education. A person who holds a temporary instructor authorization card need not comply with the age requirements of this regulation. A valid instructor authorization card or temporary instructor authorization card may be voided at any time should it be determined that a violation of this regulation has been made. Before employing any individual driver education instructor who has not had an instructor authorization card status review within the previous 12 months, the school or school system shall submit the instructor's name and other pertinent data to the Driver Education Office of the State Department of Education.

F. Certification Provisions for Instructional Personnel Who Were Rendering Instruction or Were Certified to Render Instruction Before March 1, 1974 or Both. Any person who was endorsed by the State Department of Education as a driver education instructor for a public or non-public school on or before March 1, 1974, shall be allowed in future years to retain the endorsement regardless of the driver education instructor education requirements set forth by school regulations and shall in future years be allowed by the respective school or school system to continue serving in any school day driver education capacity for which he or she was employed during school year 1973-74, provided the person meets requirements set forth in §E, above.

.09 Course—Student and Instructor Time Requirements.

Driver education course offerings approved by the State Department of Education shall be provided so that the following time requirements can be adhered to:

A. An approved course for any student shall be conducted on a correlated basis (classroom and laboratory learning experiences should be scheduled on an "integrated" basis) over a period of time not less than 3 weeks or more than 6 months unless otherwise approved by the State Department of Education under Transportation Article, §16-506.

B. During any given calendar day, a student may not participate in more than 2 hours of classroom instruction, or more than 2 hours of laboratory instruction. More than 1 hour of laboratory instruction may not be on-road behind-the-wheel instruction.

C. Any student who receives an incomplete grade (see regulation on student grading requirements) at the end of the course should be provided with needed make-up learning experience within a 6-month period following the termination of the initial course offering.

D. Each student participating in a course shall be provided with at least 30 hours of classroom instruction.

E. Each student participating in a course shall be provided with at least 6 hours of on-road behind-the-wheel instruction, or an approved laboratory substitution (see §§G, H, and I, below).

F. Each student participating in a course should be provided with some observation time of on-road behind-the-wheel instruction with another student.

G. Each student participating in a course may be provided with 4 hours of approved simulation laboratory instruction in place of 1 hour of the required on-road behind-the-wheel laboratory instruction. This simulation instruction substitution for on-road behind-the-wheel instruction may be made for up to 3 hours of the required on-road behind-the-wheel instruction.

H. Each student participating in a course may be provided with 2 hours of approved multiple-car-range instruction in place of 1 hour of the required on-road behind-the-wheel laboratory instruction. This multiple-car-range instruction may be made for up to 4 hours of the required on-road behind-the-wheel instruction (see Regulation .10C).

I. Each student participating in a course may be provided with a combination of substitute laboratory experiences specified under §§G and H, above. This combination substitute laboratory instruction for on-road behind-the-wheel instruction may be made for up to 4 hours of the required on-road behind-the-wheel instruction.

J. Any instructor who has rendered 8 hours of instruction in any subject or subjects in a given day should not be allowed to render additional instruction in an approved driver education course during that day.

K. Each laboratory instructor in an approved course shall be observed and evaluated consistent with the local school system's program, policy, or regulation for the number of required observations for classroom instructors.

.10 Minimum Facility Requirements.

Any school or school system which offers an approved course of driver education shall use facilities for that course which meet the following minimum requirements:

A. Classroom Facilities. All rooms used for classroom instruction shall meet those specifications (seating, size, lighting, audio-visual equipment, etc.) used for rooms used for other course offerings within the school. When classroom instruction is being rendered, each student shall be provided with adequate seating and writing surfaces.

B. Simulation Facilities.

(1) Driver education simulation units shall be maintained so that:

(a) All primary components remain functional;

(b) The film library is up-graded on a regular basis; and

(c) The curricula objectives remain consistent with overall course objectives.

(2) When simulation instruction is being rendered, each student within the simulation unit shall be assigned to an active teaching station (e.g., in a given period not more than 16 students can be assigned to a 16-place simulation unit.)

C. Multiple-Car-Range Facilities. Multiple-car-range driving facilities will be approved on the basis of size, design, and ability to provide students with appropriate learning experiences. A multiple-car-range which measures at least 200 feet by 400 feet when properly designed and operated shall be approved for providing students with up to 8 hours of instruction (see regulation on time requirements). Properly designed and operated multiple-car-range facilities which do not measure at least 200 feet by 400 feet may be approved for providing students with 8 hours of instruction or less.

D. Driver Education Vehicles.

(1) Each car used for on-street behind-the-wheel instruction in an approved driver education course shall:

(a) Be equipped with a dual brake and an instructor's mirror. When the car is to be used for instruction of a physically handicapped student, the car shall be equipped with those auxiliary controls which will compensate for the student's handicap.

(b) Be not more than 5 years old, or have been driven more than 100,000 miles unless otherwise authorized by the State Superintendent.

(c) Meet all other general requirements as so specified by Transportation Article—Vehicle Laws, Annotated Code of Maryland.

(d) Be equipped with at least a roof or rear bumper mounted sign which will enable other drivers approaching from the rear to identify the car as being a driver education car. The identification signs shall be yellow in color and shall at least bear the words "student driver" in black letters not less than 2 inches high.

(2) Adequate provisions shall be taken by the school or school system to maintain all driver education cars in a mechanically sound condition and to secure all driver education vehicles when they are not in use.

.11 State Reimbursement Requirements.

The State Department of Education shall reimburse any school or school system, which offers a driver education course approved by the

(See following page)

State Department of Education, by an amount, exclusive of and separate from any other State aid, equal to the cost of the course, but not to exceed $65 for each eligible student (see regulation on student eligibility requirements) participating in a complete course on or after July 1, 1974. Before receiving the full amount of annual reimbursement which an approved school or school system is entitled, the school or school system shall report all driver education course costs incurred during the reporting period to the State Department of Education in a form prescribed by the State Superintendent of Schools. Items to be reported for annual driver education course costs shall include:

A. Instructional Salaries. This category should include indirect costs for instructional personnel as well as the respective salaries incurred.

B. Driver Education Car Costs. This category should reflect all costs incurred in obtaining, maintaining, and operating driver education vehicles (to include insurance). Only those costs identified as being directly or indirectly related to the instructional program will be considered as being eligible for State reimbursement.

C. Instructional Materials and Supplies. This category should reflect any costs incurred in these categories for the reporting period.

D. Administrative Expenditures. The reported amount should show the amount (direct and indirect) received by personnel directly responsible for administering the driver education course or courses (e.g., school system driver education supervisor or headmaster). In cases where this function is assumed by a part-time person, only that percent of the person's time devoted to driver education should be reported.

E. Instructional Equipment. This category should indicate costs incurred for projectors, multiple-car-range equipment, etc. Only those facility expenditures assumed by the school or school system should be reported.

F. Other Appropriate Driver Education Costs. Any other justified driver education course cost should be reported in this category. The State Superintendent of Schools must approve costs reported in this category before those costs can be considered for State reimbursement.

.12 Program Data Requirements.

A. The State Department of Education, and those schools or school systems which provide approved driver education courses, shall record and maintain pertinent program data. Approved schools or school systems shall be responsible for specific course records to include the following:

(1) Maintaining documentation to substantiate reported annual course costs (see regulation on State reimbursement requirements);

(2) Maintaining annual records showing total amount of student fees assessed, the number of students who were assessed a "partial" or "total" fee (see regulation on student eligibility requirements), and other sources of program revenue;

(3) Maintaining records of schedules utilized for each course offering;

(4) Submitting individual school, instructor, course, and student data to the State Department of Education.

B. These records shall be maintained for at least 3 years after the annual reporting period and shall upon request be made available to the State Superintendent of Schools or his designated representative. The State Department of Education shall be responsible for:

(1) Maintaining documentation to substantiate the cost of that portion of the Statewide driver education program under the jurisdiction of the State Board of Education and the Board of School Commissioners of Baltimore City;

(2) Maintaining individual school, instructor, course, and student data so as to implement a program of evaluation to determine the effectiveness of driver education courses in terms of collision reduction potential;

(3) Providing student certificates and other pertinent driver education course management data to schools or school systems under the jurisdiction of the State Board of Education and the Board of School Commissioners of Baltimore City.

C. All pertinent program data shall be recorded and made available in a manner prescribed by the State Superintendent of Schools.

.13 Program Evaluation.

A. Intermediate. Evaluation relative to course costs, time requirements, minimum facility standards, and student performance shall be accomplished on a continuing basis through the joint efforts of the State Department of Education and respective schools or school systems.

B. Long-Range. An evaluation employing data, including data specified in the program data requirements regulation of this chapter, may be conducted to determine internal and external effectiveness of the program administered by the State Department of Education.

Administrative History

Effective date: January 8, 1970

Chapter revised effective July 23, 1975 (2:16 Md. R. 1138)

Regulations .03–.05, .10 amended as an emergency provision effective August 25, 1981 (8:19 Md. R. 1561); emergency status expired January 16, 1982 (Emergency provisions are temporary and not printed in COMAR)

Regulations .03; .04A, B; .05; .09K; and .10D amended effective January 18, 1982 (9:1 Md. R. 23)

CHANGES TO REGULATIONS

Changes frequently occur to regulations published in the Code of Maryland Regulations (COMAR). These changes are always printed in the *Maryland Register*, COMAR's bi-weekly supplement. Consult the "Cumulative Table of COMAR Regulations Adopted, Amended, or Repealed", and other COMAR Research Aids, in the most recent issue of the *Maryland Register*.

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APPENDIX D

Forms and checklists used in the operation of the driver education program are included here for informational use.

Instructors requiring a supply of any particular form or checklist are to contact the Transportation Department of the Board of Education.

Range Instruction Check-List

Student________________________________ B.D.____________ School______________________

Year_______________ Range Orientation Completed on________________

The following Driving Tasks/Maneuvers have been covered during the range instruction section of the driver education course. It should be noted that several of the check-list maneuvers involve a wide variety of driving skills that must be utilized in order to satisfactorily complete the maneuver. The complete listing of driving skills taught will be found in the Curriculum Guide for Driver Education.

	U	S	Init
1. Pre-entry vehicle check			
2. Adjusts seat, mirror, restraints			
3. Proper starting technique			
4. Proper use of gears			
5. Hand-over-hand turning			
6. Proper use of signals			
7. Proper traffic checks			
8. Smooth acceleration			
9. Smooth deceleration			
10. Proper use of brakes/braking			
11. Maintaining lane position			
12. Proper execution of L/R turns			
13. Proper recovery following turns			
14. Proper backing procedures			
15. Good execution of backing turn			
16. Can angle park			
17. Perpendicular parking			
18. Can parallel park			
19. Ability to "Y" turn			
20. Ability to "T" turn			
21. Safe merging techniques			
22. Safe yield techniques			
23. Demonstrating following distance			
24. Safe passing maneuver			
25. Complete stop			

Instructor's Comments:

Passed Range Yes___ No___
Needs additional instruction Yes___ No___

____
Instructor's Signature

On the Road Check List

Student________________________ School________________________ Year________

	Satisfactory	Unsatisfactory	Comments	Initials
Preparation				
1. Seat adjustment				
2. Mirror adjustment				
3. Seat belt				
4. Gauge check				
5. Door locked				
Town Driving				
1. Following distance				
2. Proper speed				
3. Deceleration/braking				
4. Smooth acceleration				
5. Obeying traffic controls				
6. Left hand turns				
7. Right hand turns				
8. Recovery from turns				
9. Use of turn signals				
10. Pedestrian observation				
11. I.P.D.E. reaction				
12. Use of mirrors				
13. Lane position				
Open Road Driving				
1. I.P.D.E. reaction				
2. Acceleration				
3. Lane changing				
4. Entering highway				
5. Leaving highway				
6. Observing traffic controls				
7. Proper braking/deceleration				
8. Eye movement				
9. Following distance				
10. Maintaining proper speed				
11. Control through curves				
12. Passing slower traffic				
13. Maintaining lane position				
14. Use of signals				
15. Left and right turns				
16. Use of mirrors				
17. Yielding				
18. Smooth stops				
19. Complete stops				

Comments:

Original - student file
Copy - to student with certificate

Vehicle Check List—Pick-Up

II Pick-up ____________________ ____________________________________
Date Received Dealer Verification

A. Exterior	Check List( )	Comments:
1. Paint		
2. Mirrors		
3. Molding trim		
4. Tires (white or black)		
5. Hub caps		
6. Bumpers		
7. Pin strips		
8. Vinyl roof		
9. Antenna		
10. Tail light lenses		
11. Lock nut wrench (glove compartment)		
12. Door alignment		
13. Hood alignment		
14. Trunk alignment		
15. Windshield and windows		

B. Interior		
1. Mirrors		
2. Upholstery (seats, doors, dash, ceiling)		
3. Spare tire		
4. Interior trim		
5. Lock button		
6. Emergency brake		
7. Instructor's brake		
8. Carpet		
9. Mats		
10. Trunk compartment		
11. Glove compartment		
12. Radio		
13. Control buttons and knobs		
14. Dome light		
15. Dash padding		
16. Cigarette lighter		
17. Arm rest		
18. Seat belts		
19. Head restraint		
20. Windshield wipers and washer		
21. Air conditioner		
22. Head lights and tail lights		
23. Brake lights		
24. Pedals		
25. Selector lever		
26. Sun visor		
27. Seat adjustment		
28. Horn		

Vehicle Check List—Return

II Return ______________________ Date Returned ______________________ Dealer Verification

	Check List( )	Comments:
A. Exterior		
1. Paint		
2. Mirrors		
3. Molding trim		
4. Tires (white or black)		
5. Hub caps		
6. Bumpers		
7. Pin strips		
8. Vinyl roof		
9. Antenna		
10. Tail light lenses		
11. Lock nut wrench (glove compartment)		
12. Door alignment		
13. Hood alignment		
14. Trunk alignment		
15. Windshield and windows		
B. Interior		
1. Mirrors		
2. Upholstery (seats, doors, dash, ceiling)		
3. Spare tire		
4. Interior trim		
5. Lock button		
6. Emergency brake		
7. Instructor's brake		
8. Carpet		
9. Mats		
10. Trunk compartment		
11. Glove compartment		
12. Radio		
13. Control buttons and knobs		
14. Dome light		
15. Dash padding		
16. Cigarette lighter		
17. Arm rest		
18. Seat belts		
19. Head restraint		
20. Windshield wipers and washer		
21. Air conditioner		
22. Head lights and tail lights		
23. Brake lights		
24. Pedals		
25. Selector lever		
26. Sun visor		
27. Seat adjustment		
28. Horn		

BOARD OF EDUCATION OF FREDERICK COUNTY
Frederick, Maryland

Vehicle Pick-up Check List

School ______________________________ Pick-up Date ______________

Dealer ______________________________

Make of Car ______________________________ Color ______________

Serial Number ______________________________ Odometer ______________

License Tag No. ______________________________

Equipment (Check)

Outside Mirrors ______________

Automatic Transmission ______________

Dual Brake ______________

Hydraulic ______________

Mechanical ______________

Signs - DRIVER EDUCATION or STUDENT DRIVER

Sides ______________

Rear ______________

Note here any body, paint or upholstery damage at the time of pick-up.

____

____

____

The person obtaining the vehicle should fill out two of these forms and have both signed by the dealer or his representative. One copy is for the Supervisor of Driver Education and one is for the dealer.

Dealer's Signature ______________________________

Instructor's Signature ______________________________

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Board of Education of Frederick County
Frederick, Maryland

Vehicle Return Check List

Date of Return ______________________ School ______________

Dealer ______________________ Odometer ______________

Car (Make, Model, Year) ______________________

Tag Number ______________ Serial Number ______________

Check List	Check O.K.
Body - including fenders & doors	( )
Bumpers - including gravel pans or attached accessories	( )
Wheels - including hub caps	( )
Tires	( )
Glass	( )
Lights	( )
Upholstery - includes all interior fabric	( )
Mats	( )
Accessories	( )

Describe briefly, but clearly, the damage and cost estimate in connection with any item not checked above. Also, describe any damage to items not covered in this check list:

Dealer's Signature ______________________

Instructor's Signature ______________________

Complete in duplicate - one copy to Supervisor of Driver Education and one copy for Dealer files.

Driver Education Vehicle
Repair/Return Log

VEHICLE ______________________________ STOCK # ________________

DEALER TAG ______________

NATURE OF PROBLEM ____

____

____

____

DATE TAKEN TO DEALER ____________________

DATE RETURNED TO SERVICE ____________________

1. How many instructional periods were lost while vehicle was out of service?
   ____
2. Was the problem a repeat of a past problem? ________________

Driver Education Staff Member ________________________

Date ____________________

Return to Driver Education Curriculum Specialist once the vehicle has been returned to service.

APPENDIX E

For use with Unit III - The Effects of Alcohol and Drugs on Driving

This information is supplied to the teacher for use during Unit III. It contains charts, statistics, and information that is not covered by the textbook. Teachers are urged to incorporate information in this appendix into their lesson plans. Much of the material can be used to stimulate class discussion.

The Board of Education of Frederick County desires that teenagers enrolled in driver education classes be made aware of the consequences of driving a motor vehicle while under the influence of alcohol and/or drugs.

Acknowledgement is made to the Frederick County Alcoholism Program for supplying the information contained in this appendix.

The drinking driver is a problem of major proportions

1 Drinking drivers are responsible for crashes 4 times more often than they are the victims of crashes.

2 Over 800,000 "run-of-the-mill" crashes per year are alcohol-related.

3 About 28,000 deaths per year result from alcohol-related auto accidents.

4 1 to 4% of drunk drivers (those with a BAC of .10% or higher) cause 50% of fatal single-car accidents.

5 Problem drinkers account for at least 60% of alcohol-involved accidents.

6 Alcoholics in fatal accidents often have histories of personal violence, depression, strong suicidal drives, and paranoia.

7 80% of the fatally injured drivers who were not at fault in all crashes had no alcohol in their bodies.

8 48% to 57% of drivers killed in single-car crashes had a BAC of .10% or higher.

9 45% of drivers killed in multi-car crashes had a BAC of .10% or higher.

10 80% of passengers killed in single-car crashes had been drinking.

11 40% of pedestrians killed have a BAC of .10% or higher.

12 Most alcohol-involved crashes occur between 6:00 pm and 6:00 am on Saturdays.

13 As high as 97% of drivers arrested for "driving under the influence" have a BAC of .10% or higher.

14 Drinking driver arrests in America average out to two arrests per policeman per year.

15 For every drinking driver arrest, 2,000 such offenses go unheeded.

16 Of the drinking drivers involved in 1,000 fatal drunk-driving accidents (California, 1961), 25% were convicted and only 5% (50 drivers) were jailed.

SOURCE: Compiled from various research studies

How Serious is Drunk Driving?

The seriousness of drunk driving is not recognized by many Americans. "Everybody" drinks and "everybody" drives and "everybody" does both at least occasionally. So what? What these people are unaware of is the tremendous amount of destruction that is caused by drinking and driving. Every year drunk drivers are responsible for:

- 27,000-30,000 fatalities or 1 every 20 minutes.

- 2,350,000 injuries (greater than the population of Baltimore and Washington combined). Many of these injuries are permanent.

- $7.3 billion economic loss. This is nearly $20 million a day.

Drunk driving laws in the United States are among the most lenient in the world. The way other countries handle drunk drivers:

- In Finland a drunk driver can get up to five months in jail with any amount of alcohol in his system. Hard labor is added if injury or death is involved.

- In Bulgaria, there is a 10 year minimum jail sentence for any fatality.

- In Norway and Sweden there is an automatic jail sentence.

- In Australia the driver's name is printed in the local papers under the heading "He's drunk and in jail."

- South Africa has a maximum 10 year prison sentence and/or $2,800 fine.

- In San Salvador the drunk driver is executed by a firing squad.

- In Turkey the drunk driver is taken 20 miles away from his car and forced to walk back under guard. If you have ever tried to walk 20 miles while drunk you know that you are probably better off being caught in San Salvador.

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Statistics

- 60% of all traffic fatalities had alcohol in their bloodstream as tested by Medical Examiner.
- .08% BAC -- four times as likely to be involved in a fatal accident as an individual not drinking to excess.
- .10% BAC -- seven times as likely.
- .15% BAC -- 25 times as likely.
- Drinking drivers in the U.S. kill more people in two years than were killed in 10 years of the Vietnam War. (50,000+)
- Drinking and driving is the major cause of death in those 25 years old and younger.
- Drinking and driving kills over 25,000 people per year in the U.S.-- more than all other types of violent death combined.
- One of every two Americans will be involved in at least one alcohol-related accident in their lifetime.
- Ten percent of all adults will experience alcoholism or problem drinking some point in their lifetime.

ALCOHOL AND VISION

Lens → Pupil → Rods and Cones → Retina → Optic Nerve → Brain

surrounded by six muscles

Lens - distance - focus light on rods and cones
Pupil - amount of light
Rods and Cones - color vision
Retina - transmit message into nerve impluse for optic nerve
Brain - interprets message

Alcohol's Effects on the EYE:

1. Focus lens - fuzzy picture
   amount of light - glare recovery at night

2. Visual Acuity - sharpness
   night vision
   color - rods and cones

3. Double Vision - muscle control
   depth perception - focus on two points or ignore one image

4. Distance - muscles

5. Peripheral Vision - speed decreases + alcohol = tunnel vision

6. Colors - blurring.

ADVERSE INTERACTIONS WITH ALCOHOL

Interacting Drugs	Adverse Effect	Probable Mechanism
Acetaminophen (*Tylenol*; others)	Increased hepatotoxicity	Increased production of toxic metabolites
Anesthetics	Decreased effectiveness for induction of anesthesia	Increased tolerance to anesthetics
	Increased level of anesthesia	Additive
Anticoagulants, oral	Decreased anticoagulant effect with chronic alcohol abuse	Increased metabolism
	Increased anticoagulant effect with acute intoxication	Decreased metabolism
Antihistamines	Increased CNS depression with acute intoxication	Additive
Barbiturates	Decreased sedative effect with chronic alcohol abuse	Increased metabolism
	Increased CNS depression with acute intoxication	Additive; decreased metabolism
Benzodiazepines	Increased CNS depression	Additive
Bromocriptine (*Parlodel*)	Nausea, abdominal pain	Possible increased dopamine receptor sensitivity
Chloral hydrate (*Noctec*, others)	Prolonged hypnotic effect	Synergism
Chloramphenicol (*Chloromycetin*; others)	Minor Antabuse-like symptoms	Inhibition of intermediary metabolism of alcohol
Cycloserine (*Seromycin*)	Increased convulsions with chronic abuse	Not established
Disulfiram (*Antabuse*)	Abdominal cramps, flushing, vomiting, psychotic episodes, confusion	Inhibition of intermediary metabolism of alcohol
Hypoglycemics, oral, sulfonylureas	Decreased hypoglycemic effect with chronic alcohol abuse	Increased metabolism
	Increased hypoglycemic effect with ingestion of alcohol, particularly in fasting patients	Suppression of gluconeogenesis
	Minor Antabuse-like symptoms	Inhibition of intermediary metabolism of alcohol
	Flushing with chlorpropamide (*Diabinese*)	Not established
Isoniazid (INH; others)	Increased incidence of hepatitis	Not established
	Decreased isoniazid effect in some patients with chronic alcohol abuse	Increased metabolism
Meprobamate (*Equanil, Miltown*; others)	Decreased sedative effect with chronic alcohol abuse	Increased metabolism
	Increased CNS depression with acute intoxication	Additive; decreased metabolism
Methisazone (*Marboran*)	Increased methisazone toxicity	Not established
Metronidazole (*Flagyl*)	Mild Antabuse-like symptoms	Possible inhibition of intermediary metabolism of alcohol
Narcotics	Increased CNS depression with acute intoxication	Additive
Phenformin	Lactic acidosis	Synergism
Phenothiazines	Increased CNS depression	Additive
Phenytoin (*Dilantin*; others)	Decreased anticonvulsant effect with chronic alcohol abuse	Increased metabolism
	Increased anticonvulsant effect with acute intoxication	Decreased metabolism
Propranolol (*Inderal*)	Masks tachycardia and tremor of alcoholic hypoglycemia	Beta-receptor blockade
Quinacrine (*Atabrine*)	Minor Antabuse-like symptoms	Inhibition of intermediary metabolism of alcohol
Salicylates	Gastrointestinal bleeding	Additive

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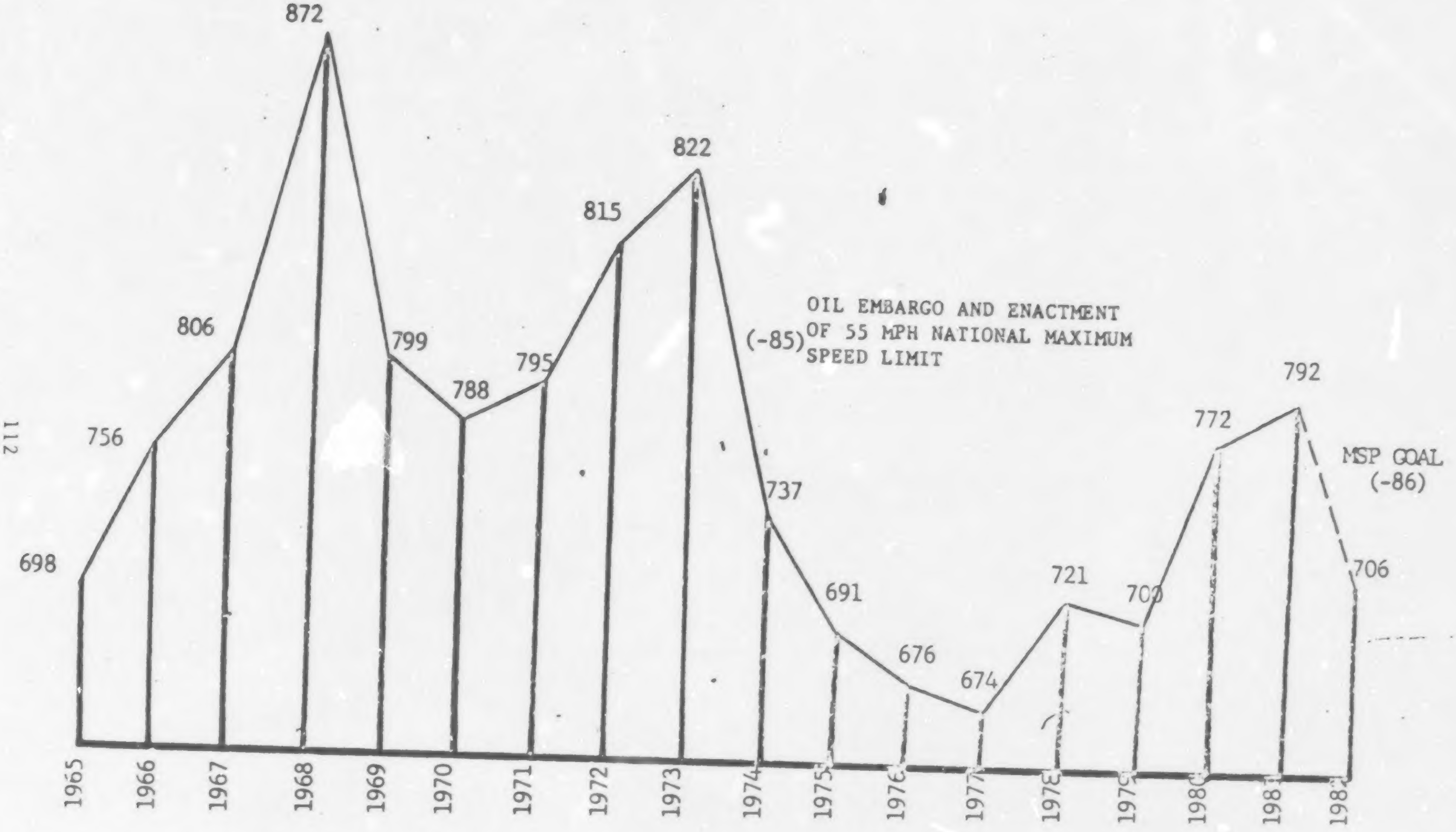

MARYLAND HIGHWAY FATALITIES

Double Trouble: Mixing Drinks with Other Drugs

A Glossary is included as a part of this summary. The first time a glossary term appears in the text it is *italicized.*

What Is a Drug?

When people hear the word *drug*,* they tend to think of medicines prescribed by a physician or the "hard drugs" and other legally defined substances whose sale and possession are controlled by law. In fact, any substance that contains chemicals which change a person's behavior or functioning is a drug. Thus alcohol is classified as a drug. This definition of a drug usually implies that the substances are taken for their intended effect, but it has been broadened to include many external substances (insecticides, food) and internal substances that are naturally present in the body in certain amounts (cholesterol, hormones).

Americans Take Numerous Drugs

From the morning vitamin pills to the evening laxatives, often with plenty of coffee, tea, cigarettes, *tranquilizers*, soft drinks, and alcoholic beverages in between, Americans ingest and inhale an astounding variety of drugs every day. There are pills to stay awake and pills to go to sleep, syrups for coughs and tablets for colds. Headache, acid indigestion, motion sickness, hay fever, tired blood – every TV viewer with any of these symptoms knows that he or she is a "sufferer" who needs suffer no more because there is an over-the-counter remedy waiting at the drugstore or supermarket. Furthermore, the visit to a doctor is often not complete without the ritual of a prescription changing hands. To a large degree, we are conditioned to expect that there is something we can "take" to relieve every symptom or alleviate every problem. This conditioning is, in turn, handed down to our children as they observe us taking our cold capsules, drinking our beer, and smoking our cigarettes. Perhaps, to children, these are some of the long-sought privileges of adulthood. America is a drug-taking Nation, and alcohol is a drug.

Drugs May Interact

Drug interaction is the phenomenon that occurs when one or more drugs present in the body alter the actions or effects of another drug present in the body at the same time. Fortunately, most drugs do not interact with most other drugs. On the other hand, there are many known instances (and more come to light continually) of the use of two drugs at the same time changing the effects of one or both. Some of the interactions may be minor, while others have proven disastrous. It is the consequence of a given interaction which is significant, rather than the fact that two drugs may interact.

When drugs are taken in combination, the effects usually fall into one of four categories:

1. *Drugs taken together may act independently of each other.* For example, aspirin may lower the body temperature of a fevered patient while an appropriate *antibiotic* drug is eliminating the organism responsible for the disease and fever. Similarly, present knowledge indicates that alcohol does not interfere with the action of vitamins or *oral contraceptives*, and vice versa. Each drug acts independently even though they are both present in the body at the same time.

2. *Drugs taken together may have a summative or additive effect.* When two drugs that elicit the same overt response produce a combined effect equal to that expected by simple addition, the interaction is called *summative* or *additive*. For example, both codeine and aspirin have the overt effect of relieving pain. When small doses of aspirin and codeine are taken concurrently, the combined effect is relief of pain equal to the sum of the effects of the two drugs acting alone (up to the capacity of the person's system to respond). Another example is the combination of alcohol and codeine-formula cough syrups. Both have the overt effect of sedation. Taken together so that both drugs are active in the body at the same time, a *sedative effect* is produced equal to a simple addition of the separate effects: 2 + 2 = 4.

3. *Drugs taken together may have a synergistic effect. Synergism* is the word used to describe the situation when the joint effect of two drugs is greater than the sum of the effects of the two drugs alone. This usually happens in cases in which one drug increases (potentiates) the effect of the second drug by altering its *biotransformation*, distribution, or *excretion*. Thus in synergistic drug interactions, the effect of the second drug may be intensified or the duration of its action may be prolonged. For example, when alcohol and *antihistamines* are active in the body at the same time, the drugs interact to produce an exaggerated sedative effect that is greater than the sum of the effects of the two drugs acting alone: 2 + 2 = 5.

4. *Drugs taken together may have an antagonistic effect.* Any time the joint effects of two drugs is less than the sum of the effects of the drugs acting separately, the interaction is called drug antagonism: 2 + 2 = 3. An example of an *antagonistic* interaction is the combination of alcohol and amphetamines (e.g., Benzedrine) in which the *central nervous system* (CNS) *depressant* effect of alcohol is less than it would be if alcohol were

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*A Glossary begins on page 4. The first time a glossary term appears in the text is it *italicized.*

taken alone. This is a particularly tricky combination that illustrates a further complexity of drug interactions—drugs can have more than one effect, and in drug combinations some of the effects may interact and others may act independently. Although amphetamines antagonize or decrease the CNS depressant effects of alcohol, the impairment of *motor coordination* that results from drinking alcohol is not counteracted by amphetamines. As a result, a person who has been drinking *feels* more alert after taking an amphetamine, but driving and other motor skills are not improved, although one tends to think they are. This false sense of security leads to many traffic and other accidents.

Dose-Time-Response

The degree or magnitude of the effect produced by a drug is a function of the quantity (dose) of the drug present at its site of action at any given time. The more that is present, the greater the effect (up to the limit of the system to respond). Usually a drug does not reach its site of action right away; its presence is determined by the processes of *absorption* and distribution within the body. Nor does the drug's presence at its site of action continue indefinitely; it is redistributed, *metabolized*, and/or excreted. Thus, at any given moment the response or magnitude of the drug effect is a function of not only dose but also of time—the time involved in getting the drug to and from its site of action.

Dose and time are also important in interactions between two or more drugs. Each drug in the combination has its own *dose-time-response relationship*. The interaction consequences can generally be predicted by considering the quantity of each drug one has taken and the time that has elapsed between the first and second drug. Generally, the greatest interaction effect occurs when the two drugs are taken at the same time, and it is generally true that the longer the time interval between taking the drugs, the less likely the interaction response will be observed.

Other Factors

In addition to dose and time, the response to a drug or a combination of drugs is also affected by a number of other factors that can make an individual's response different from that of the "average" person or the majority of the population. These include:

Body weight and size. In general, smaller persons require lower amounts of drugs than larger persons to produce effects of equal intensity. This is because a larger person has a larger volume or body mass, in which the drug(s) is distributed, so the effective drug concentration of the site(s) of action is less than that in a smaller person taking the same dose.

Age. Individuals at the extremes of a normal lifespan (infants and elderly persons) are often unusually sensitive to drugs. This drug sensitivity is associated with differing rates of absorption, distribution, metabolism, or excretion. In general, the elderly tend to be particularly sensitive to *narcotics, analgesics*, and alcohol.

Sex. Simply on the basis of weight, women may require smaller doses of drugs than men do to obtain the same response. However, with few exceptions, the response of men and women to the action of the drug or drugs is the same. At the same blood alcohol concentration, the effects of alcohol are no different for women than for men.

Nutritional state. Alcohol, unlike other drugs, can be used by the body as a source of energy. This supply of calories often suppresses appetite and may lead to dietary deficiencies in chronic alcohol users. A poor nutritional state (regardless of its cause) can produce altered drug sensitivities.

General state of health. Physiologic variables such as changes in body temperature, water content, or pH of body fluids may modify the effects of drugs in generally healthy individuals. Many chronic disease states (such as high blood pressure, diabetes) may change the person's response to drugs. In addition, these individuals are often taking specific drugs for control of the disease, symptom relief, or other therapeutic indications. Interactions of alcohol with these drugs and disease states are important, but apply only to these patients.

Psychological factors. The mere act of taking a drug may produce effects of varying intensity that are unrelated to its *pharmacologic* action and cannot be attributed to its chemical properties. The best example is the often astonishing therapeutic effect of placebos—dummy or sugar pills—when a patient believes that they will bring relief. Drug effects (including those of drug combinations) are also influenced by the set (response expected) and the setting (milieu or environment) in which the drug is taken. Individual response to the general class of CNS depressants (including alcohol) when taken for personal reasons rather than for therapeutic purposes may be changed by what the individual wants or expects to happen.

Tolerance. With prior or repeated use of a drug or one closely allied in pharmacologic activity, a condition of *tolerance* or decreased responsiveness to the drug may develop. Tolerance is characterized by the necessity of increasing the size of successive doses of the drug in order to produce effects that are equal in intensity or duration to those achieved initially. Another way of saying this is that the same dose of a drug is less effective than it was the time before, so it takes a larger dose to achieve the same desired effect. Tolerance disappears when the use of the drug which produced it is discontinued, but the rate of disappearance may be rapid or prolonged. The degree of tolerance produced varies widely from one class of drugs to another. For example, the habitual user of morphine may tolerate doses many times greater than the doses that would cause death in a nontolerant person. Individuals tolerant to alcohol or *barbiturates* have fewer and less marked effects from moderate doses than do abstainers, but both tolerant and nontolerant individuals are affected about equally by high or near-lethal doses. Furthermore, tolerances do not develop uniformly to all of the pharmacologic effects of a drug.

Another characteristic of the tolerant state is that of *cross-tolerance* among drugs belonging to the same class. For example, persons tolerant to morphine are also tolerant to heroin, methadone, and other narcotic agents but not to alcoholic or barbiturates. On the other hand, persons tolerant to alcohol have a degree of tolerance to barbiturates and vice versa, but have no tolerance to narcotics.

Toxic Interactions

A *toxic* drug effect is one that is harmful to well-being or life. There are several drug interactions with alcohol that are toxic and can have serious consequences. The most important are:

Alcohol and barbiturates. The most dangerous type of drug to take in combination with alcohol is the sleeping pill containing barbiturates. A person should avoid taking these drugs (most of which have names ending in "ital" or "al," such as phenobarbital) in combination with alcohol because the interaction may cause severe depression of the central nervous

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system, even to the point of death. Furthermore, if a person is tolerant to either alcohol or barbiturates because of repeated frequent use, this tolerance is also likely to operate for the other drug in this combination (cross-tolerance) so that a larger dose is more likely to be taken. At these larger doses, tolerance is less likely to continue to operate. The drowsiness due to enhanced sedative effect of the alcohol/barbiturate combination may make any individual, whether tolerant or not, forget how much of either or both drugs he or she has already taken. Because of this oversight, the person may take still more of the drug(s) with lethal consequences. Doses that would not be lethal for either alcohol or barbiturate alone may become lethal when the two drugs are taken together or within only a short period of time. Certain authorities consider such accidental overdoses to be responsible for many nonsuicidal barbiturate and alcohol deaths.

Alcohol and major tranquilizers in combination produce an additive sedative effect, causing impairment of muscle coordination and judgment.

Alcohol and antihistamines in combination produce an interaction of the synergistic type for the CNS depression effects. This drug combination may cause drowsiness that can endanger an operator of any kind of machinery.

Alcohol and aspirin increase the possibility of irritation of the stomach and small intestine.

Alcohol and insulin or other *antidiabetic* drugs may cause low blood sugar sooner than a person would have expected without drinking alcohol.

Alcohol and stimulants. Mild stimulants such as caffeine (which is contained in coffee, tea, cola drinks) and stronger *stimulants* such as amphetamines (e.g., Benzedrine) antagonize the CNS depressant effect of alcohol, but do not counteract the loss of motor coordination resulting from drinking alcohol.

Alcohol and disulfiram. Disulfiram (Antabuse) is a drug that is often used to help problem drinkers avoid alcohol because it interacts with even small amounts of alcohol causing nausea and vomiting. In the process of metabolic *oxidation* of alcohol, alcohol is degraded by an *enzyme, alcohol dehydrogenase,* and the product of this reaction is *acetaldehyde.* Acetaldehyde is toxic but is ordinarily changed by another enzyme so rapidly that it does not accumulate in the body in any significant amount. Disulfiram blocks or slows the enzyme that converts acetaldehyde, so the blood concentration of acetaldehyde builds up and results in nausea and vomiting. Certain other drugs, notably the *monoamine oxidase inhibitors,* also produce a disulfiram-type reaction through interference with acetaldehyde metabolism. The severity of the disulfiram reaction varies with the individual and the amount of alcohol taken. *The combination of disulfiram and alcohol is potentially lethal. Disulfiram should not be administered to anyone without his or her full knowledge and never administered to an intoxicated person.* Disulfiram is a deterrent to drinking, not a cure for intoxication.

This summary of important drug interactions with alcohol is based on present knowledge. There are undoubtedly other interactions that have not yet been discovered. It should be noted that the listed reactions will not necessarily occur in every individual, or even in the same individual every time the combination is taken. The listing of dangerous drug combinations is given as a guide and not meant to preclude using them in certain circumstances. However, this should be done with caution and only on the advice of a physician, dentist, or other professional person. If one is unsure about the advisability of drinking alcohol in combination with other drugs one may be taking, a physician or pharmacist should be consulted.

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Glossary

Absorption: Process by which alcohol passes from the small intestine and stomach into the bloodstream.

Acetaldehyde: A liquid formed in the liver during the first stage of alcohol oxidation.

Adaptation: Adjusting to increasing amounts of alcohol. The more one drinks, the more is needed to reach a high. Over a period of time, the drinker can get greater control over behavior and movements, but the rates of absorption and oxidation do not decrease. Each person has a limit beyond which he or she cannot adjust to the increased alcohol. See also *Tolerance*.

Additive effect: The result of two or more drugs acting together. The total effect is like simple addition (1 + 1 = 2).

Alcohol dehydrogenase: An enzyme which transfers the hydrogen from ethanol to make acetaldehyde in the first stage of processing the alcohol in the body.

Analgesic: A pain reliever that does not make the person unconscious.

Antagonistic effect: If two or more drugs are taken at the same time, one of the drugs may interfere with the action of the other drug.

Anti: A prefix meaning "against."

Antianginal preparation: A medicine for heart disease.

Antibiotic: A substance used in treatment of infectious diseases which inhibits the growth of, or even destroys, bacteria and other microorganisms.

Anticoagulant: Something that prevents blood clotting.

Anticonvulsant: Something that prevents or stops convulsions or "fits," such as epileptic seizures.

Antidepressant: A drug used to treat depression (extremely low spirits, feeling down).

Antidiabetic agent: A drug used in treating diabetes.

Antihistamine: A drug used in the treatment of allergy, sinus, and common cold symptoms.

Antihypertensive agent: A drug used to lower the blood pressure in persons with high blood pressure.

Anti-infective agent: A drug used to fight infection.

Barbiturate: A strong, calming drug used to bring on sleep.

Biotransformation: Changing drugs into other substances by the body.

Central nervous system (CNS): The parts of the body (brain, spinal cord, and certain nerves) that control voluntary (deliberate, such as raising your hand) and involuntary (automatic, such as breathing) processes and reactions in the body.

Cross-tolerance: Regularly taking alcohol or a certain drug (especially barbiturates) can cause the person to adjust to another drug of the same drug family.

Depressant: A drug which calms a person down by acting on the central nervous system.

Disulfiram (Antabuse): A drug which makes a person sick if he or she drinks alcohol. The person may feel nausea, may vomit, or may faint.

Diuretic: A substance which increases urination by releasing water held in the tissues.

Dose-time response relationship: The relationship between the amount of drug(s) taken and the time it takes for the drug(s) to reach a certain part of the body, take effect, and then pass out of the body. This relationship is important in predicting drug interaction effects.

Drug: Any substance containing chemicals which change the way a person feels or acts.

Drug interaction: The reaction of one drug to another drug when both drugs are present in the body at the same time.

Enzymes: Substances in the body which bring about chemical change, without being changed themselves.

Excretion: Getting rid of waste from the body; elimination.

Gastrointestinal (GI) tract: The part of the body consisting of the stomach and intestines, where alcohol is first absorbed after intake.

Generic name: The common or chemical name of a drug rather than its brand name or trade name. For example, the generic name for Librium is chlordiazepoxide hydrochloride.

Hallucinogen: A drug which produces hallucinations, or illusions (visions, sounds, etc., which are not really there.)

Hypertensive crisis: A short period of highly increased blood pressure.

Hypoglycemia: A condition in which the amount of sugar in the blood is much below normal.

Metabolize: To make chemical changes within the body, especially related to the processing of foods in living matter, and the later production of waste material. In the case of alcohol, to change alcohol into heat and energy.

Monoamine oxidase inhibitors: Antidepressant and hypotensive agents which interfere with the work of certain enzymes.

Motor coordination: Parts of the body, especially arms and legs, moving in harmony with each other.

Narcotic: A drug which, used in moderate doses, produces stupor, insensibility, or sound sleep.

Oral contraceptives: Pills women take to keep from getting pregnant.

Oxidation: The process of alcohol combining with oxygen. Nonoxidized alcohol causes intoxication. Many things influence a person's rate of oxidation, but generally speaking, about one drink (1 ounce of alcohol) can be oxidized per hour.

Pharmacology: The science that deals with drugs, their sources, appearance, chemistry, actions, and uses.

Psychological: Related to the mind.

Sedative: An agent that calms a person down, producing sleepiness but not sleep.

Stimulant: An agent which strengthens the action of the heart, increases activity, and brings about a sense of well-being.

Summative effect: The result of two or more drugs acting together. The total effect is like simple addition (1 + 1 = 2).

Synergistic effect: The situation in which the effect of two drugs together is greater than the sum of the individual effects of these drugs if taken alone.

Tolerance: A condition in which the body responds less and less to repeated use of a drug or another drug in the same drug family, so that a greater dose is needed to get the same effect. See also *Adaptation*.

Toxic: Harmful to well-being or life.

Trade name: The brand or proprietary name of a drug, rather than the generic name. For example, the trade name for chlordiazepoxide hydrochloride is Librium. See also *Generic name*.

Tranquilizer: A drug that calms down a tense, anxious person.

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Alcohol-Drug Interaction Chart

Analgesics Drug Classification ←
Narcotics Sub-Classification ←
codeine (cough syrups w/codeine; (Trade Name) ←
Novahistine-Expectorant; Phenaphen w/codeine)
heroin "junk", "H" - "Slang Term" ←
meperidine (Demerol)
methadone (Dolophine) "Dollies"
morphine "Dreamer"; "M"

Legend

Drug	Possible Effects of Combining this Drug with Alcohol
Analgesics *Narcotics* *codeine (cough syrups w/codeine, Novahistine-Expectorant; Phenaphen w/codeine)* *heroin "junk"; "H"* *meperidine (Demerol)* *methadone (Dolophine) "Dollies"* *morphine "Dreamer"; "M"*	Increased central nervous system (CNS) and respiratory depression Synergism of CNS depressant effect Respiratory arrest in large doses Tolerance to depressant effects*
Non-narcotics *Salicylates* *acetylsalicylic acid (aspirin, Excedrin)*	Increased gastrointestinal (GI) blood loss and damage to stomach lining induced by aspirin Excessive alcohol intake and ingestion of aspirin may lead to severe GI bleeding
Other *d-propoxyphene (Darvon)*	CNS and respiratory depression
Antianginal Preparations *Nitrates and nitrites* *nitroglycerin (Nitrong; Nitrostat)* *pentaerythritol tetranitrate (Antora; Peritrtol, Pentrate)*	Synergism of dilation of blood vessels Decreased blood pressure
Peripheral vasodilators *tolazoline (Priscoline)*	Possible disulfiram-like effect
Anticoagulants *Coumarins* *bishydroxycoumarin (Dicumarol)* *warfarin sodium (Coumadin; Panwarfin)*	Unpredictable; occasional increased sensitivity to drug Decreased or increased blood clotting ability Occasional moderate use of alcohol is unlikely to interfere with therapeutic effect in patients without liver disease Excessive alcohol use should be avoided
Anticonvulsants *carbamazepine (Tegretol)*	Enhanced sedative effect
diphenylhydantoin (Dilan, Dilantin)	Decreased drug effect* Possible seizures

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*Effect is most likely to occur with chronic consumption of alcohol.

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Antidepressants *Tricyclic* *amitriptyline (Elavil)* *desipramine (Norpramin, Pertofrane)* *doxepin (Sinequan)* *imipramine (Presamine, Tofranil)* *nortriptyline (Aventyl)* *protriptyline (Vivactil)*	Enhanced CNS depressant effects Impairment of motor skills related to driving or operating machinery Potentially lethal in large doses
Monoamine Oxidase Inhibitors *isocarboxazid (Marplan)* *pargyline (Eutonyl)* *tranylcypromine (Parnate)*	Mechanism unknown Monoamine oxidase may inhibit metabolism of alcohol Increased sedative effects Nausea Vomiting Headache Increased blood pressure Heart palpitations Hypertensive crisis (with certain drinks, e.g., Chianti and beer)
Antidiabetic Agents *Insulin (Iletin)*	Alcohol, per se, may cause hypoglycemia; in combination with insulin the effect may be augmented, resulting in increased drug effect Control of diabetes more difficult Possible severe hypoglycemia
Oral Sulfonylureas *acetohexamide (Dymelor)* *chlorpropamide (Diabinese)* *tolazamide (Tolinase)* *tolbutamide (Orinase)*	Alcohol induces enzymes that degrade acetohexamide, slowing its metabolism Decreased hypoglycemic activity* Possible disulfiram-like reaction
Phenformin (DBI; Meltrol)	Lactic acidosis may occur due to increased blood lactic acid levels produced by both phenformin and alcohol CNS dysfunction Nausea Vomiting Potentially lethal in large doses
Antihistamines *Alkylamines* *brompheniramine maleate (Dimetane, Dimetapp)* *chlorpheniramine maleate (Allerest, Coricidin, Novahistine)* *Ethanolamines* *diphenhydramine (Benadryl)* *diphenylpyraline (Diafen, Hispril Spansule)* *Ethylenediamines* *methapyrilene (Brexin, Histadyl E.C.)* *tripelennamine (Pyribenzamine)* *Phenothiazines* *promethazine (Phenergan, Synalgos)*	CNS depression effects of drug synergized by alcohol Synergism of sedative effects (varies with class of drug)

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*Effect is most likely to occur with chronic consumption of alcohol.

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Antihypertensive Agents *Alpha-methyldopa (Aldomet)*	Increased CNS depression
Guanethidine (Esimil, Ismelin)	Synergistic postural hypotensive effect may produce dizziness, fainting spells, and blackouts
Pargyline (see ANTIDEPRESSANTS, Monoamine Oxidase Inhibitors)	
Rauwolfia alkaloids *deserpidine (Enduronyl, Harmonyl)* *reserpine (Butiserpazide, Hydromox, Serpasil)*	Increased CNS depression
Anti-Infective Agents (including those commonly called antibiotics) *Chloramphenicol (Chloromycetin)*	Possible disulfiram-like reaction
Griseofulvin (Fulvicin U/F)	Augments sedative effects of alcohol Mechanism unknown
Metronidazole (Flagyl) *Nitrofurans* *furazolidone (Furoxone, Tricofuron)* *nifuroxime (Furacin Otic, Tricofuron)*	Possible disulfiram-type reaction Furazolidone synergizes alcohol by MAO and microsomal enzyme inhibition
Penicillin	No known reactions
Others	There are too many to be specific in this chart. Ask your doctor when given the prescription
Central Nervous System Stimulants *Cocaine "Coke"*	No interactions have been reported
Amphetamines (Benzedrine) "Bennies" (Biphetamines) - "Black Beauties", "Speed" *Caffeine (contained in certain pain killers) (Aspirin Phenacetin Caffeine capsules; Empirin; No-Doz) (soft drinks, coffee)* *Dextroamphetamines (Dexedrine) "Dexies", (Eskatrol)* *Methylphenidate (Ritalin)*	Antagonizes CNS depression No motor coordination improvement—as with alcohol alone
Nicotine (cigarettes)	Clinical importance not established
Hallucinogens *Cannabis (Marihuana) "Pot", THC, "Hash"*	Additive effect Mental and motor impairment
Lysergic acid diethylamide "LSD", "Acid"	Reported but questionable precipitation of LSD flashbacks
Mescaline - "Mesc" *Psilocybin "Mushrooms"*	No reported drug interaction
Oral Contraceptives (Norinyl, Ortho-Novum, Ovral) "B.C. Pills"	No reported drug interaction

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Sedative-Hypnotics *Barbiturates - "Downs"* *amobarbital (Amytal)* *butabarbital (Butisol)* *pentobarbital (Nembutal)* *phenobarbital (Luminal and various others)* *secobarbital (Seconals) - "Reds"* *Nonbarbiturates* *carbromal (Carbrital)* *chloral hydrate (Felsules, Noctec) - "Mickey Finn")* *chloralbetaine (Beta-Chlor)* *ethchlorvynal (Placidyl)* *flurazepam (Dalmane - see "Minor Tranquilizers")* *glutethimide (Doriden)* *methaqualone (Quaalude; Sopor) - "Rover"*	Enhanced CNS and respiratory depression Cross-tolerance to sedative effect among sedative-hypnotics and with alcohol Potentially lethal combination in large doses Nausea Vomiting
Tranquilizers (also used as muscle relaxants) *Minor* *chlordiazepoxide (Librium; Libritabs)* *diazepam (Valium)* *flurazepam (Dalmane)* *oxazepam (Serax)*	Caution should be used when driving or operating machinery At social drinking levels, there is no synergism of CNS depression At more than social drinking levels, increased sedation and CNS depressant effects Cross-tolerance to sedative effect*
hydroxyzine (Atarax; Vistaril) *meprobamate (Esquanil; Miltown)* *tybamate (Solacen; Tybatran)*	Additive or synergistic increase of CNS depressant effect of alcohol
Major *Butyrophenones* *haloperidol (Haldol)* *Phenothiazines* *chlorpromazine (Thorazine)* *perphenazine (Trilafon)* *prochlorperazine (Compazine)* *thioridazine (Mellaril)* *trifluoperazine (Stelazine)*	Additive CNS depression (sedation) Impairment of muscle coordination and judgment
Vitamins	No reported drug interaction; in alcoholism, however, severe malnutrition is often noted
Miscellaneous *Antimalarials* *quinacrine (Atabrine, Mepacrine)*	Drug inhibits acetaldehyde oxidation, blocks alcohol metabolism Disulfiram-like reaction
Disulfiram (Antabuse)	Nausea Vomiting Death when intoxicated NEVER administer to a person without his/her full knowledge or if he/she is intoxicated
Muscle relaxants (see Minor Tranquilizers)	

*Effect is most likely to occur with chronic consumption of alcohol.

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Reflections in a Glass is a course for women in NCAE's Decisions and Drinking series.

DHEW Publication No. (ADM) 77-452A
Printed 1977

This publication was prepared by the National Center for Alcohol Education under contract number ADM 281-75-0013 from the National Institute on Alcohol Abuse and Alcoholism. NCAE is administered for NIAAA under this contract by University Research Corporation. All statements herein do not necessarily reflect the opinions, official policy, or position of the National Institute on Alcohol Abuse and Alcoholism, Alcohol, Drug Abuse, and Mental Health Administration, Public Health Service, U.S. Department of Health, Education, and Welfare.

APPENDIX F

Insurance information useful to Driver Education Staff.

INSURANCE INFORMATION

I. Insurance rates are based on risk factors. The more chances of having an accident -- the higher the rates charged, i.e.:

> Males under 20 years -- used to have two times the number of accidents of "normal" drivers. Now recent studies show five times the number of accidents of "normal" driver.

II. Risk factors based on such things as:

> age, sex, distance driven, marital status,driving record, inexperience, location of home, type of car.

III. Insurance carriers often will not carry a driver who has a D.W.I. on record (high risk driver)

IV. Maryland offers insurance to the driver who cannot get it through a standard insurance carrier:

- MAIF (Maryland Auto Insurance Fund)
- non-profit
- rates charged are based on money paid out in last year (more claims equals higher dollars)
- now offers "safe driver" rates with three year clear record.

Examples of costs (October, 1982) not to be quoted

1. Male, 20 yrs. and younger, unmarried, 6 points, 10 miles or less, Frederick resident $868 liability only; $1750 full coverage after three years of no points: $310 liability; $600 full coverage
2. Female, same as #1 $638 liability, $1300 full coverage
3. Female, married, same as #1 above (19 & over) $556 liability $1100 full coverage
4. Male, single 21-24 years old, less than 10 miles, 12 pts. or more $1058 liability $2100 full coverage
5. Female, single or married, 21-24 years old, less than 10 miles, 12 pts. $898 liability $1800 full coverage
6. Male married, 30 yrs. or older, 12 pts. $898 liability $1800 full coverage after 3 years and no points $185 liability $360 full coverage.

V. If you standard insurance carrier indicates it is going to drop coverage ask you agent if they will have a substandard carrier to offer. Rates may be more expensive than MAIF, but it will be much easier to go back to a standard carrier. (Provided first D.W.I.)

VI. Once on MAIF, it is difficult to return to a standard insurance carrier, because they will ask why you are on MAIF.

VII. Every two to three years, insurance companies check driving records.

INSURANCE INFORMATION (Con't)

VIII. Never lie to an agent; when asked a question by an agent who is trying to prepare a rate for you, never misrepresent your situation to the company.

IX. If your company refuses to cover you and plans to put onto MAIF, check into excluding yourself and one vehicle from your regular policy and keep the remaining family members and vehicles on the standard carrer. Be sure not to drive the other vehicles if you do this!

X. The rates for MAIF are doubled if you live in Baltimore Metro. area. Multiply the above rates by the number of vehicles you are covering (no reduction for covering more than one vehicle as standard insurance companies do).

APPENDIX G

16MM motion picture films, filmstrips, and transparency sets appropriate for use in driver education classes are listed in this appendix. Please be aware that changes in availability of any one title may occur. Additions or deletions of audiovisual material will be sent to users of this guide as they occur.

The following are films available from the Transportation Department of the Board of Education:

A Run For Your Money - This film demonstrates how important economical driving is to the driver. It gives many tips to use to improve gas mileage. e.g. Good car maintenance done at regular intervals will also improve mileage.

Night Driving Tactics - At night there is reduced visibility which is the factor for more accidents at night. This film details what should be done to prevent accidents at dusk, what overdriving your headlights means, how to safely handle a stalled car at night, how to drive with approaching lights on high and how to deal with tiredness at night. Very good film dealing with hazards involved with night driving. Good with Chapter 13, *Drive Right*.

13 minutes
Color - early 60's
Older film but has
good value

Pro-Driving Attitudes - The film sets up three categories of drivers: poor, average and pro. There are various characteristics that make a pro driver - good driving skills, knowledge of traffic laws, and a good positive attitude. Attitude involves four parts:

A. Alert
B. Wary
C. Patient
D. Consideration

Through the use of various driving situations, the different parts of a good driving attitude are explained. Good for use with Chapter 5 *Drive Right*.

Defensive Driving Tactics - This film explains what is involved in being a good defensive driver. A test is run between an offensive driver and a defensive driver. The test showed that there was little difference in travel time of the two cars, but a big difference in the number of violations and potential accident situations.

15 minutes

Space Driving Tactics - This film explains the need to always maintain a space cushion around your car. It shows reaction and braking distances for 30 mph and 50 mph and the need for a greater following distance. The two second following distance is explained and demonstrated at different speeds. Tips are given on how to maintain your space - to the rear, side, and front. Excellent film for use with Chapters 4 and 5 in *Drive Right*.

14 minutes
Color

The following films are also available from the Transportation Department of the Board of Education:

1. A System for the Road
2. Safety Belts and You - 2 copies
3. Facts About Tires
4. The Final Factor
5. Water Skiing on Four Wheels
6. Attitudes, Emotions and Driving
7. The Driving Scene
8. Are You Convinced?
9. Make Winter Driving Safer
10. Visual Perception in Driving - Eye Habits
11. Visual Perception in Driving - Identification
12. Egg, Pumpkin, Headache
13. Dynamics of a Crash

The following films are available from the Instructional Materials Center:

F 1486 ABC of High Energy Ignition System
17 min. color SH

Animation and live action help explain the basic principles of automotive electricity and point out the differences between the old ignition system and the HEI.

F 1487 ABC of the Automobile Chassis
15 min. color SH

The flow of power from engine to wheels in an automobile is explained through animation and models.

F 1488 ABC of the Automobile Engine
15 min. color SH

Cutaway models and animation illustrate the workings of an internal combustion engine.

F 1489 ABC of the Catalytic Converter
11 min. color SH

Animation and line action illustrate how the converter works and how it reduces automotive emissions.

F 1496 Unrestrained Flying Objects
14 min. color SH

This film discusses the problem of drivers and passengers that do use their restraint systems. It also discusses the attitudes of drivers as it relates to the use of seat belts.

F 1497 Until I Get Caught
27 min. color SH

A documentary film about the dangers of drinking and driving as discussed by experts in the United States and Sweden.

F 1498 We Drivers
24 min. color SH

This is a live-action driver education film which discusses the fundamentals of responsible driving. It includes a field trip to the General Motors proving grounds where students meet professional drivers and practice avoidance techniques.

Resource Films for D.W.I. Clinic

Drivers Who Die - Medical examiners trying to determine who is at fault in a fatal accident. (20 minutes)

Sure, Mac, Sure - Short episodes which explore the myths of drinking. (5 minutes)

Beyond Human Limits - Five volunteers drive a test course on a racetrack. Dry scores vs. wet scores.

How Much is Too Much - Volunteers perform field sobriety tests in a part atmosphere. Compares sober vs. drunk ability to perform tasks.

Medical Aspects, Part II - Shows effect on body systems, alcohol creates hypoglycemia.

Until I Get Caught - Comparison of attitudes and laws in America and Sweden. Shows families of victims of fatal alcohol-related crashes and Nashville enforcement program.

Chalk Talk, Revised - Father Joseph Martin explains effects of alcohol on individual and progressive stages of alcoholism. (45 minutes)

The Summer We Moved to Elm Street - Shows effects of alcoholism on family - particularly children. (23 minutes)

My Name is David and I'm an Alcoholic - David is fired from his job due to his alcoholism. More directed toward Employee Assistance Programs. (under 30 minutes)

C.R.A.S.H. - Shows Vermont program and how "PAUL" became involved in a CRASH program.

NOTE: This listing continued on next page.

Spirits of America - Shows history of drinking in U.S. from colonial times through prohibition and up to current time in cartoon form.

Why Me - Road test on an island in North Carolina of four individuals. Compares scores of each individual sober, under influence of alcohol and under influence of 1 of 4 drugs: marijuana, darvon, valium and benadryl.

The above films can be found at the following agencies:

Frederick County Alcoholism Program
500 West Patrick Street
Frederick, Maryland 21701
694-1750

Maryland State Police/Frederick City Police

Frederick County Council on Alcoholism
P.O. Box 526
Frederick, Maryland 21701

National Institute on Alcohol Abuse and Alcoholism
P.O. Box 2345
Rockville, Maryland 20852

The following are Maryland State Police films:

Contact Person:
Marcia Abrams
Maryland State Police Library
1201 Reisterstown Rd.
Pikesville, Maryland 21208
301-486-3101 - Ext. 258

Basic Street Riding - Riding in, mixing with traffic are the subjects of this film. The process of identifying potential hazards, predicting points of conflict, deciding the safest course of action and executing the action is introduced. (color, 20 min.)

Before It's Too Late - Demonstrates the importance of using seat belts. In slow motion it shows the tossing, turning and twisting of occupants in a crash situation. (color, 13 min.)

Carrier or Killer - Covers the six main causes of accidents today: weather, alcohol, pills, fatigue, carelessness. Made for the trucking industry. (color, 28 min.)

Until I Get Caught - Drinking and driving film. (color, 22 min.)

City Driving - Rome, Paris, Tokyo traffic compared to the U.S.A. None of the motorists in the rest of the world have it as good as we do. Six guideline factors are stressed: sight, speed, turns, signals, signs, space. (color, 17 min.)

Defensive Driving Tactics - Compares defensive driver vs. offensive driver on a trip through Chicago to Evanston, providing wisdom of sane driving. (color, 15 min.)

Don't Skid Yourself - Skid tests conducted on frozen lake shows comparative stopping distances between normal treads and chains. (black and white, 13 min.)

Drinking and Driving - Good program for adults on the problems of drinking and driving. (black and white, 8 min.)

Driving At Night - Points up the vast difference between driving in daylight and darkness. (color, 10 min.)

Driving in Bad Weather - Shows proper factors to be considered while driving on ice, snow, mud, fog and times of poor visibility. (color, 10 min.)

Driving in the City - A number of very good tips to insure safe city operation. (color, 10 min.)

NOTE: This listing continued on next page.

Driving Like a Pro - Stresses importance of perceptions, visual habits, speed control and prepared decisions all within the context of identifying, predicting, deciding and executing. (color, 31 min.)

Drugs, Drinking and Driving - Points out the dangers of alcohol and many prescription drugs on driving. It emphasizes the danger of combining the two. Very poor condition. (color, 18 min.)

Emergencies in the Making - Pictures many pitfalls of driving. An excellent film for driver education. (color, 14 min.)

The Final Factor - Shows five cases where a driver can get into trouble with the wrong set of circumstances. (color, 15 min.)

Handling Emergencies - Presents common emergency situations and prepares drivers to take proper collision avoiding actions. (color, 23 min.)

Waterskiing on Four Wheels - This film explores the technical reasons for hydroplaning in a manner which makes the danger and its prevention readily understandable to the audience. (color, 13 min.)

Teen-age Drinking and Driving - The film is a classroom discussion of teenager drinking with a group of high school students. Good with small groups to generate topics for later discussion. Not good for large audiences. (color, 30 min.)

The Next Few Seconds - Shows stopping distances. (black and white, 10 min.)

Night Driving Tactics - Although there is less traffic at night there are 2-1/2 times more accidents than in daylight hours - mainly due to poor visibility. Pointers for easier, safer night driving. (color, 13 min.)

Nite and Bad Weather Driving - Shows why darkness and bad weather are the worst killers. Deals with safety steps to take when driving during bad weather, how to prevent a skid, and many other safety precautions. (black and white, 10 min.)

None For the Road - What happens to Mr. Average social drinker when he climbs behind the wheel? Junior high and up. (color, 12 min.)

Love That Car - Deals with the care of your car. Very good and well received by driver education classes. (color, 10 min.)

The following filmstrip sets are available for use by teachers:

1. I.P.D.E. - A System For Accident-Free Driving
2. Driving Strategies for Rural Highways
3. Laws of Nature and Driving
4. Hazard Perception
5. The Driving Task
6. Driving Challenge (two 50-question filmstrips)
7. Intersection Maneuvers
8. Passing Maneuvers

Note: All of the above, with the exception of Driving Challenge are cassette filmstrip sets. All are available from the Transportation Department of the Board of Education. Strategy and Tactics of Driving, a 23-unit overhead transparency kit, is available from the Transportation Department.

APPENDIX H

Regulation 200-12 - Use of Driver Education Vehicles

BOARD OF EDUCATION OF FREDERICK COUNTY	Reg. No.:
Subject: OPERATION OF DRIVER EDUCATION VEHICLES ASSIGNED TO SCHOOL STAFF	Date of Issue:
Preparing Office: Office of the Superintendent	Rescission: Effective Date:

I. Policy

II. Procedures

A. The principal or his designated representative shall assign driver education motor vehicles to staff members. Assignments are determined by the number of vehicles assigned to the school minus those driven by the driver education staff working at the school.

1. The purpose of assigning driver education vehicles to school staff members is to provide off site storage of the vehicles during the non-school hours.

2. ·Staff members assigned driver education motor vehicles will be permitted the use of vehicle only after offering proof that they have a valid Maryland driver's license

3. Board of Education leased driver education vehicles shall not be operated by unauthorized persons. Personal use of driver education vehicles is not authorized.

a. Personal use includes any use, not coincidental to what would be the normal daily routes followed to and from work by the employee.

b. Unauthorized persons are those persons not employed by the Board of Education and any Board of Education Employee specifically prohibited by law or by administrative action from operating a Board of Education vehicle.

c. Unauthorized use includes the transportation of hitchhikers.

4. Employees assigned motor vehicles shall be personally responsible for the cleanliness, care, and safe operation of them.

a. Employees must notify a driver education staff member when the vehicle assigned to them required fuel or maintenance. In some cases, employees may utilize the driver education credit card for fuel purchases.

b. Credit cards are to be used only for gasoline and oil.

B. Operators of Board of Education driver education vehicles shall exercise good driving conduct, anticipating weather, road, and traffic conditions and shall observe all laws governing the operation of motor vehicles in the prevailing jurisdictions. Operators of driver education vehicles shall submit all required reports, receipts, and records incidental to the operation of the assigned vehicle.

1. Employees assigned motor vehicles may be responsible for reimbursing the Board of Education for damages to the assigned vehicle sustained as a result of unauthorized use or gross negligence.

2. Operators of any Driver Education vehicles shall be personally liable for any fines or penalties for traffic violations or accidents incurred.

3. Under Maryland Motor Vehicle law the driver of a vehicle in an accident in which death or personal injury is sustained must file a written report of such accident to the Motor Vehicle Administration. No report need be submitted when the accident has been investigated by the police and an accident report has been filed with the Maryland State Police. However, a report must always be filed with the designated Board of Education supervisors and the Board's insurance company.

4. The following procedures should be followed if you are involved in an accident with a Board of Education own vehicle without suffering personal injury.

    a. Notify the police. Request emergency medical vehicles and service if injuries are sustained by anyone.

    b. Do not accept responsibility for the accident or discuss it with anyone except the investigating police officer or the representatives of the Board of Education.

    c. Accident report forms should be completed as accurately as possible (200-9). This form is available from any driver education staff member. It is the primary responsibility of the driver to see that the report is completed and filed with the Curriculum Specialist for Driver Education who will forward copies to the Motor Vehicle Administration, the Board of Education's insurance carrier, and other designated agents.

    d. The Driver Education Curriculum Specialist, Director of Finance, and the Board of Education's insurance carrier will coordinate the repair of all Board of Education vehicles and the settlement of all claims arising out of any accidents involving driver education vehicles.

    e. In the event a Board of Education employee is injured in an accident involving a Board of Education owned vehicle, an Employer's First Report of Injury or Occupational Disease form should be filed as directed under Reporting of Injury to Board of Education Employees Policy and Procedure (200-11).